STUDIE REEKS

23

AMBITIOUS ENTREPRENEURSHIP
A review of the state of the art

Erik Stam, Niels Bosma, Arjen van Witteloostuijn
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in samenwerking met de Nederlandse Adviesraad voor Wetenschaps- en Technologiebeleid (AWT)

VLAAMSE RAAD VOOR WETENSCHAP EN INNOVATIE

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SAMENVATTING

AMBITIEUS ONDERNEMERSCHAP: DEFINITIE, OORZAKEN EN AFBAKENING VAN HET ONDERZOEK

Voor toekomstige welvaart zijn investeringen in kennis, en het toepassen van deze kennis in de samenleving, van cruciaal belang. Ondernemerschap speelt een belangrijke rol in het toepassen van deze kennis, en in het creëren van nieuwe waarde in zijn algemeenheid. Om tot waardecreatie te komen dienen individuen niet alleen kansen waar te nemen, maar deze ook te realiseren. Dit gaat verder dan individuen die slechts eigen baas willen zijn. Om kansen voor substantiële veranderingen in de samenleving te realiseren zijn ambitieuze ondernemers nodig.

De afgelopen decennia werd door beleidsmakers vaak geconcludeerd dat er in Nederland en België te weinig ondernemers zijn. Dat probleem lijkt voor Nederland inmiddels grotendeels opgelost: Nederland staat sinds kort te boek als Europees kampioen ondernemerschap, met het hoogste percentage ondernemers in de volwassen bevolking en een grote aanwas van nieuwe ondernemingen. In termen van groeiende of innovatieve jonge bedrijven doet Nederland het maar middelmatig, en staat België onderaan in internationale vergelijkingen. Dit is problematisch omdat juist dit de brandstof voor werkgelegenheidscreatie en (verdere) welvaartsgroei vormt.

Er kunnen diverse redenen voor dit gebrek aan ambitieuze ondernemers aangeduid worden. Eén van de oorzaken die de wetenschappelijke literatuur aanwijst, heeft te maken met onze welvaartsstaat. Vele Belgische en Nederlandse werknemers werken comfortabel in loondienst en hebben te maken met hoge opportuniteitskosten, indien zij de stap naar ambitieus ondernemerschap wagen. Zelf-

ontplooiing wordt vaak belangrijker geacht dan het veranderen van de wereld, bij menig individu zal de behoefte om bovengemiddeld te presteren bescheiden zijn (gereflecteerd in een geringe prestatiegerichtheid – "need for achievement"). Andere oorzaken van het geringe aantal ambitieuze ondernemers zijn een gebrek aan kansen voor innovatie in een relatief stagnerende economie, een gebrekkige talentontwikkeling, of demotiverende institutionele factoren.

In dit rapport wordt verslag gedaan van een literatuurstudie omtrent de kenmerken en verklaringen van het verschijnsel "ambitieus ondernemerschap", met als doel aangrijpingspunten te vinden voor beleidsformulering. Ondernemerschap omvat het proces waarin kansen voor het creëren van goederen en diensten in de toekomst wordt ontdekt, geëvalueerd en geëxploiteerd. Een ambitieuze ondernemer wordt in dit rapport gezien als iemand (a) die betrokken is in het proces van ondernemerschap en (b) die hierbij een nieuwe onderneming ontwikkelt met als doel zoveel mogelijk nieuwe waarde te creëren – waar te nemen in innovatie, internationalisering en (boven alles) groei.

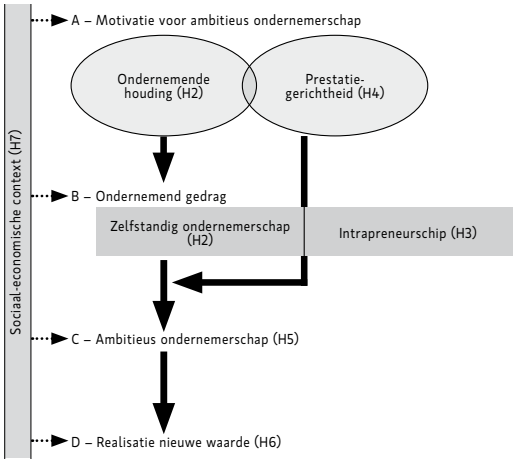
Het proces van ondernemerschap behelst het ontdekken, evalueren en exploiteren van kansen voor nieuwe goederen en diensten. Hierbij is een ondernemer niet noodzakelijk iemand die een eigen bedrijf heeft en bestuurt; ook werknemers die ambitieuze activiteiten ontplooien met het doel om zoveel mogelijk waarde te creëren worden gezien als ambitieuze ondernemers (in Angelsaksisch jargon: "intrapreneurs"). Naast het bestuderen van de kenmerken en oorzaken van ambitieus ondernemerschap, geeft dit rapport ook inzicht in de daaropvolgende stap van waardecreatie, zowel op micro- als op macroniveau. Deze inzichten voorzien in een

kennisbasis voor het verbeteren van ondernemerschapsbeleid dat bijdraagt aan de ontwikkeling van een welvarende kennissamenleving die in staat is om toekomstige maatschappelijke uitdagingen succesvol aan te gaan.

BELANGRIJKE TRANSITIES EN DE OPBOUW VAN DIT RAPPORT

De analyse van de kenmerken en oorzaken van ambitieus ondernemerschap is in dit rapport gestructureerd aan de hand van de cruciale transities die individuen doorlopen om tot ambitieus ondernemerschap te komen (zie Figuur I.1). Hierbij worden twee paden onderscheiden die kunnen leiden tot ambitieus ondernemerschap. Het eerste pad loopt via het ontwikkelen van een ondernemende houding en ondernemende intenties naar daadwerkelijk ondernemend gedrag (Hoofdstukken 2 en 3). De intentie tot het creëren van zoveel mogelijk nieuwe waarde komt hier na de intentie om ondernemer te worden.

Figuur I.1: Transitiemodel ambitieus ondernemerschap



Het tweede pad gaat juist uit van prestatiedrang, waarbij de ondernemende intenties minder expliciet aanwezig zijn. De kansen voor ondernemerschap kunnen voor deze individuen min of meer toevallig 'op hun pad' komen (Hoofdstuk 4). Als een ondernemer in eerste instantie nog niet ambitieus is, kunnen de intentie tot groei, internationalisering en innovatie ook worden geactiveerd nadat het ondernemende gedrag is geïnitieerd (Hoofdstuk 5). Tenslotte moeten deze ambities – wat ook het bewandelde pad is – ook nog worden gerealiseerd (Hoofdstuk 6).

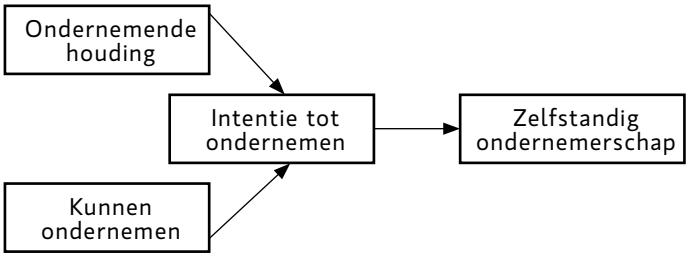
Al deze transities worden bovendien nog eens beïnvloed door de sociaal-economische context waarin de ondernemer zich bevindt: bijvoorbeeld het macro-economische klimaat, demografische factoren, formele en informele instituties (Hoofdstuk 7). In hoofdstuk 8 worden de belangrijkste verklaringen voor ambitieus ondernemerschap samengevat, en worden de beperkingen van het bestaande onderzoek en de kansen voor toekomstig onderzoek besproken.

Voor de meeste transities zijn internationaal vergelijkbare empirische indicatoren beschikbaar (zie ook Hoofdstuk 9): voor ondernemend gedrag zijn cijfers van zelfstandig ondernemerschap en intrapreneurship beschikbaar, voor ambitieus ondernemerschap zijn cijfers voor de export-, innovatie-, en groei-intenties van ondernemers van jonge ondernemingen voorhanden, en voor de realisatie van nieuwe waarde kunnen cijfers voor de groei van jonge en van middelgrote ondernemingen worden gebruikt. Helaas zijn er voor prestatiegerichtheid nog geen internationaal vergelijkbare empirische indicatoren beschikbaar. Voor een ondernemende houding kunnen cijfers uit de Global Entrepreneurship Monitor (Bosma & Levie 2010) en de Eurobarometer (European Commission 2009) worden benut.

DE BELANGRIJKSTE VERKLARINGEN VAN AMBITIEUS ONDERNEMERSCHAP

In de definitie van ambitieus ondernemerschap komt het belang van een procesmatige benadering naar voren. Figuur I.2 laat zien dat een zekere oriëntatie (is het ondernemerschap aantrekkelijk voor mij en heb ik de benodigde vaardigheden?) plaats vindt voordat de intentie tot ondernemerschap wordt ontwikkeld. Daarop volgt de stap van intentie naar daadwerkelijk ondernemen.

Figuur I.2: Determinanten voor zelfstandig ondernemerschap

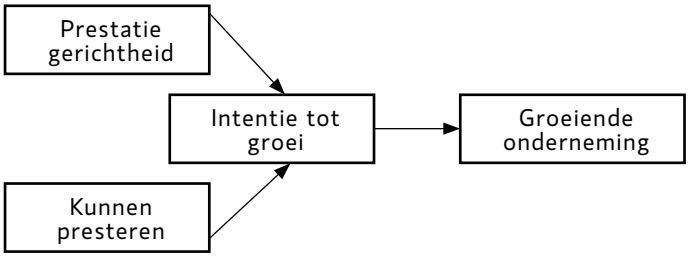


Voor ambitieus ondernemerschap (figuur I.3) gelden weliswaar dezelfde stappen, maar hier is bij elke transitie daarnaast ook sprake van een complementaire afweging. In wetenschappelijk onderzoek wordt ambitieus ondernemerschap veelal gemeten met de intentie tot groei die de ondernemer heeft. Dit staat centraal in figuur I.3. De intentie tot groei wordt in grote mate bepaald door de drang, kennis en vaardigheden om te presteren, en de intenties reflecteren in dat geval niet alleen de intentie tot ondernemen maar ook die om nieuwe waarde te creëren op grote schaal.

De verklaringen van zelfstandig ondernemerschap dan wel ambitieus ondernemerschap verschillen nadrukkelijk op enkele punten: zo is prestatiegerichtheid eerder

een noodzakelijke voorwaarde voor ambitieus ondernemerschap dan voor zelfstandig ondernemerschap. De behoefte aan onafhankelijkheid speelt dan weer sterker bij zelfstandig ondernemerschap, terwijl het slechts van beperkte invloed is bij ambitieus ondernemerschap. Tot slot is het opleidingsniveau van de ondernemer van groter belang voor ambitieus ondernemerschap dan voor zelfstandig ondernemerschap.

Figuur I.3: Determinanten voor groei van nieuwe onderneming

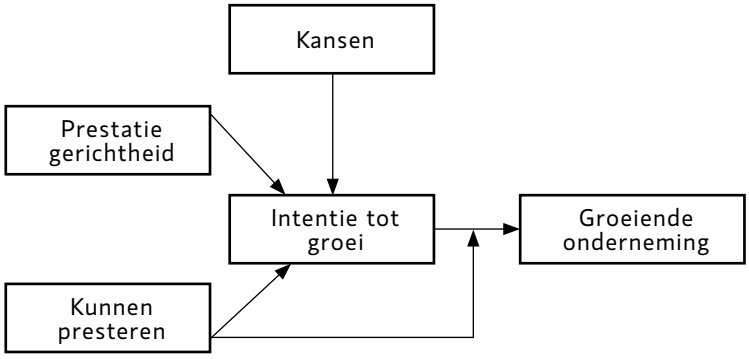


De modellen in Figuur I.2 en Figuur I.3 zijn uiteraard een abstracte weergave van het ondernemerschapsproces. Ten eerste veronderstelt deze abstractie een lineair proces. Niet alle (potentiële) ondernemers zullen het pad echter van "links" naar "rechts" bewandelen. Zij kunnen bijvoorbeeld ook eerst een intentie tot het creëren van waarde ontwikkelen en pas daarop hun kennis ontwikkelen. In een levensloopperspectief kan het ook zijn dat individuen ervaring hebben opgedaan met ondernemerschap, en daardoor hun kennis en vaardigheden met betrekking tot ondernemen en groei hebben ontwikkeld. Daarnaast kunnen sommige individuen min of meer onverwacht in ondernemerschap terechtkomen (bijvoorbeeld vanwege een erfenis), zonder zich erg bewust te zijn van de intentie tot (al dan niet ambitieus) ondernemen.

Ten tweede blijkt uit de wetenschappelijke literatuur dat de kennis en vaardigheden om te presteren niet alleen van invloed zijn op de intentie om te groeien, maar ook op de stap van intentie tot de daadwerkelijke realisatie van groei. Een hoog opleidingsniveau en leiderschapservaring helpen bij het realiseren van groei-intenties (zie Figuur I.4).

Ten derde speelt de economische context een belangrijke rol. Die bepaalt immers mede de kansen (of belemmeringen) voor ondernemerschap. In regio's met goede economische vooruitzichten zullen intentie en realisatie met betrekking tot ambitieus ondernemerschap makkelijker tot wasdom komen dan in regio's die te maken hebben met economische neergang (zie Figuur I.4).

Figuur I.4: Determinanten van groei nieuwe onderneming

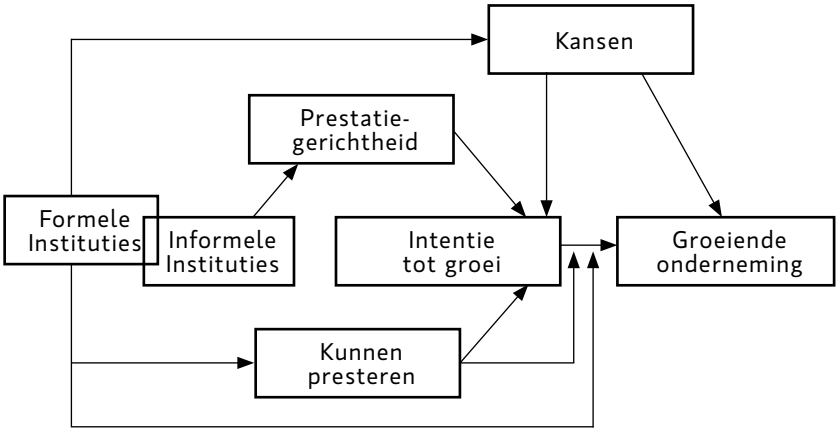


Kansen in de omgeving kunnen ambitieus ondernemerschap positief beïnvloeden, maar kunnen ook een direct positief effect hebben op de groei van ondernemingen. Het model in Figuur I.4 bevat meer processen die relevant zijn voor ambitieus

ondernemerschap. Hierbij dient aangetekend te worden dat de processen ten aanzien van 'regulier' ondernemerschap (zie Figuur I.2) niet terzijde geschoven moeten worden. Deze blijven relevant voor ambitieus ondernemerschap, maar in het rapport gaat de aandacht primair uit naar de complementaire processen die juist van belang zijn voor ambitieus ondernemerschap.

Een laatste stap is het toevoegen van de *institutionele* context. Hierin is het zinvol onderscheid te maken tussen informele en formele instituties. Met informele instituties wordt verwezen naar algemene normen en waarden ten aanzien van ambitieus ondernemerschap in de samenleving (bijvoorbeeld cultuur). Formele instituties bestaan uit de wetten en regels die gelden in de samenleving. Deze zijn directer door overheden te beïnvloeden. Ook al is er sprake van een duidelijk onderscheid tussen informele instituties en formele instituties, toch valt te verwachten – zeker in democratische samenlevingen als de Belgische en de Nederlandse – dat formele instituties in bepaalde mate de normen en waarden in de samenleving reflecteren. In Figuur I.5 is af te lezen dat informele instituties vooral een impact kunnen uitoefenen op de prestatiegerichtheid (acceptatie van ambitieuze houding in de samenleving), terwijl formele instituties op meerdere processen aangrijpen.

Figuur I.5: Institutionele context van groeiende nieuwe onderneming



DE ROL VAN INSTITUTIES

Vanuit institutioneel perspectief zijn vier benaderingen relevant voor onze analyse. De eerste invalshoek heeft betrekking op de vraag hoe de instituties de beroepskeuze van individuen beïnvloeden. Informele instituties omvatten diepgewortelde gewoonten, normen en waarden. Deze kunnen daarom niet gemakkelijk worden veranderd op korte termijn. Voor formele instituties is dit wel het geval, al zullen de effecten van veranderingen in formele instituties ook enige tijd op zich laten wachten, afhankelijk van de mate waarin wijzigingen ook daadwerkelijk doordringen tot de individuen. De inrichting van de arbeidsmarkt kan bijvoorbeeld een belangrijke schakel zijn om beroepskeuzen te beïnvloeden. Een minder strikte werknemersbescherming en het verbieden van het concurrentiebeding leiden bijvoorbeeld tot een meer open en flexibelere arbeids-

markt. Deze arbeidsmarktflexibilisering kan er voor zorgen dat meer gevestigde werknemers zullen overstappen naar ondernemerschap, en dat immigranten die voorheen geen toegang hadden tot goedbetaalde banen, juist een omgekeerde beweging maken en hun huidige 'noodgedwongen' baan als zelfstandige opgeven. Een ander voorbeeld is het stimuleren van concurrentie op productmarkten door monopolistische structuren te doorbreken, zoals bijvoorbeeld in de telecommarkt is gebeurd.

De tweede benadering behelst de beïnvloeding van de keuze tussen zelfstandig ondernemer zonder personeel enerzijds en werkgever anderzijds. Ambitieuze ondernemers zullen in de meeste gevallen fungeren als werkgever. De stap om mensen in dienst te nemen kan worden tegengewerkt door erg strikte werknemersbescherming. Beginnende ondernemers zullen twee keer nadenken alvorens werknemers aan te trekken, in de overtuiging dat ze er moeilijk van af zullen geraken als de zaken minder gaan. Tegelijkertijd zullen werknemers met de wil en de vaardigheden voor ambitieus ondernemerschap, bij zichzelf moeten nagaan of ze *überhaupt* bereid zijn om hun goed beschermde werknemerstatus op te geven en de stap naar ondernemerschap te zetten. Een zelfde argumentatie geldt voor het sociale zekerheidssysteem. Zolang de onzekerheden voornamelijk voor rekening van de ondernemer komen, zal dit een negatief effect hebben op ambitieus ondernemerschap. De paradox voor werknemers lijkt dus te liggen in het idee dat als zij (vanuit individueel perspectief) zekerheden opgeven, dit op termijn meer arbeidsmogelijkheden kan opleveren als gevolg van ambitieus ondernemerschap. Het gemakkelijker verliezen van een baan – door een flexibeler arbeidsmarkt – kan uiteindelijk leiden tot meer banen door lagere drempels tot ambitieus ondernemerschap.

De derde benadering betreft de allocatie van ondernemend gedrag over privaat zelfstandig ondernemerschap (al dan niet met personeel), privaat "intrapreneurship" (ondernemend gedrag door werknemers) en ondernemerschap in de (semi-) publieke sector. Onderzoek op het gebied van "intrapreneurship" vanuit internationaal perspectief staat nog in de kinderschoenen, maar is wel degelijk van belang voor generiek beleid voor ambitieus ondernemerschap (zie ook Bosma et al. 2011a). Als bijvoorbeeld informele instituties zodanig zijn dat de eerder genoemde vermindering van werknemersbescherming niet gerealiseerd kan worden, dan zou een gebrek aan ambitieus zelfstandig ondernemerschap gecompenseerd kunnen worden door "intrapreneurship", mits de mogelijkheden daartoe aanwezig zijn binnen bestaande organisaties.

Dit brengt ons bij de vierde benadering, die zich richt op de cruciale vraag welke instituties ervoor zorgen dat de verdeling van ondernemend (ambitieus) talent leidt tot productief ondernemerschap, dat wil zeggen, ondernemerschap dat nieuwe waarde creëert voor de samenleving. De rol van de overheid ligt hier aan de ene kant vooral in proactief optreden door het wegnemen van barrières als het gaat om het experimenteren met nieuwe combinaties van producten en/of markten. Aan de andere kant dient ondernemerschap dat niet productief is waar mogelijk uitgebannen te worden. Dit kan door buitenwettelijke praktijken vandaag aan te pakken – en in de toekomst te voorkomen. Moeilijker is het als de activiteiten niet buiten de wet plaatsvinden, maar wel een duidelijk negatief effect hebben op de samenleving. Een voorbeeld hiervan is het enerzijds versoepelen van faillissementswetgeving, dit met als doel om het opzetten van meer experimentele, risicovolle ondernemingen te stimuleren, en het anderzijds strikter maken van fail-

lissementswetgeving om misbruik voor persoonlijk gewin ten koste van schuldeisers te voorkomen.

VERKLARINGEN VAN DE OPEENVOLGENDE TRANSITIES

Het belang van de processen zoals weergegeven in Figuur I.5, in de opeenvolgende transities, wordt grotendeels ondersteund vanuit de theoretische en empirische literatuur. Intenties tot (ambitieus) ondernemerschap worden gevormd door een positieve houding ten aanzien van ondernemerschap en door de (gepercipieerde) ondernemerschapsvaardigheden. Groeiend empirisch bewijs wijst op de achterliggende invloed van sociale normen (informele instituties). Waar in het verleden vooral de impact van het sociale netwerk in familieverband is onderzocht, is meer recentelijk ook het effect van ondernemende collega's op de werkvloer en van rolmodellen in het algemene sociale netwerk van het individu aangetoond.

Voor de stap van ondernemend gedrag naar *ambitieus* ondernemerschap speelt ten eerste de economische situatie een belangrijke rol – nog belangrijker dan bij de stap naar ondernemerschap zelf. Hiernaast blijkt dat de intentie om waarde te creëren (in de meeste gevallen gemeten als de intentie om te groeien) zo goed als noodzakelijk is om daadwerkelijk tot groei te komen (vierde transitie). Uit figuur I.4 blijkt dat dit, naast de kansen die zich voordoen (economische vooruitzichten, toegang tot hulpbronnen e.d.) in sterke mate wordt beïnvloed door de kennis en vaardigheden van de ondernemer. Intenties om te groeien hangen tot slot ook af van de houding (en de verwachte consequenties) ten aanzien van groeien en van de prestatiedrang van de ondernemer.

Voor de transitie van prestatiegerichtheid naar ambitieus ondernemerschap is ook de hoogte van de *opportuniteitskosten* van ambitieus ondernemerschap essentieel. Van nieuwe ondernemers met een bovengemiddelde opleiding en relevante kennis kan eerder de intentie tot waardecreatie worden verwacht, aangezien zij doorgaans goede alternatieven op de arbeidsmarkt hebben. Onderzoek heeft daarenboven aangetoond dat omstandigheden die extrinsieke motivatie bevorderen alleen een stimulerend effect op ambitieus ondernemerschap hebben als (a) de intrinsieke motivatie ook op hoog niveau is en (b) als de extrinsieke en intrinsieke motivatie in dezelfde richting wijzen.

In de context van de transitie van ambitieus ondernemerschap naar gerealiseerde groei (de vierde transitie), zijn het hebben van *te veel* vertrouwen in eigen kunnen en in de veronderstelde kansen bekende fenomenen die het behalen van werkelijk bovengemiddelde prestaties kunnen frustreren. Voor de realisatie van verwachtingen moeten deze verwachtingen (voortkomend uit de intenties) ook haalbaar zijn. Inderdaad blijkt uit empirische studies in diverse landen dat een groot deel van bedrijfsoprichters te rooskleurige verwachtingen uitspreekt over toekomstige prestaties: zij maken deze verwachtingen veelal niet waar. Dit betekent veelal een teleurstelling op individueel microniveau, maar kan op macroniveau wel leiden tot een proces van vernieuwing en uiteindelijk tot economische groei.

BELEIDSRICHTINGEN

In hoofdstuk 9 worden inzichten uit deze rapportage uiteengezet die betrekking hebben op ondernemerschapsbeleid in België en Nederland. In deze context bediscussiëren wij ten eerste de *vorm* van beleid. Deze komen direct voort uit (i)

de focus op de diverse transities die in het rapport onderscheiden zijn; en (ii) het onderscheidende element tussen ondernemerschap in het algemeen en ambitieus ondernemerschap. Daarna gaan we in op drie *kernelementen* van mogelijk beleid ten aanzien van ambitieus ondernemerschap, zoals deze uit het rapport naar voren komen. Deze kernelementen zijn onderwijs en kennis, arbeidsmarkt en ondernemerschap binnen organisaties.

BELEID VOOR AMBITIEUS ONDERNEMERSCHAP: TRANSITIESPECIFIEK

Het overzicht van onderzoek naar ambitieus ondernemerschap heeft aangetoond dat in het licht van ambitieus ondernemerschap vier belangrijke transities kunnen worden onderscheiden (zie ook figuur I.1):

1) De transitie naar intrinsieke prestatiedrang;
2) De transitie naar zelfstandig ondernemerschap;
3) De transitie naar ambitieus ondernemerschap;
4) De transitie naar nieuwe waardecreatie

De literatuur (zoals besproken in de hoofdstukken 2 tot 7) laat zien dat elke transitie door verschillende determinanten wordt beïnvloed op micro- en macroniveau. Een magische formule om alle transities ineens te beïnvloeden bestaat simpelweg niet. Elke transitie laat zich door andere beleidsmaatregelen en -terreinen beïnvloeden. De eerste transitie omvat vooral sociaal beleid en onderwijsbeleid, terwijl de tweede transitie met name via algemeen ondernemerschapsbeleid kan worden beïnvloed. Voor de derde en vierde transitie is meer specifiek industriebeleid nodig dat zich direct richt op de groei-ambities van ondernemers en de daadwerkelijke

creatie van nieuwe waarde. De laatste transitie wordt ook sterk beïnvloed door wet- en regelgeving met betrekking tot de arbeidsmarkt. De koppeling tussen de vier transities en beleidsgebieden wordt samengevat in tabel I.1.

Tabel I.1: Koppeling tussen vier transities en beleidsgebieden

Transitie	**Beleidsgebieden**	**Stimuli (wegnemen van barrières)**
(1) Naar intrinsieke prestatiedrang	Sociaal- en onderwijsbeleid	Stimuleren van talent en intrinsieke prestatie-drang
(2) Naar zelfstandig ondernemerschap	Ondernemerschapsbeleid	Allocatie van talent; ondernemerschap als carrièreperspectief
(3) Naar ambitieus ondernemerschap	Ondernemerschapsbeleid en industriebeleid	Allocatie van onderne-merschap; houding t.o.v. groei
(4) Naar nieuwe waardecreatie	Ondernemerschapsbeleid en arbeidsmarktbeleid	Reduceren of wegnemen van barrières voor innovatie, interna-tionalisering, en groei; articuleren van publieke uitdagingen en daarin investeren

BELEID VOOR AMBITIEUS ONDERNEMERSCHAP: OVERLAPPEND, COMPLE-MENTAIR EN CONFLICTEREND MET ALGEMEEN ONDERNEMERSCHAPSBELEID

Beleid voor ambitieus ondernemerschap is deels overlappend met algemeen on-dernemerschapsbeleid, deels complementair en deels conflicterend. Vanuit het oogpunt van ambitieus ondernemerschap is het positief dat al beleid bestaat dat ondernemend gedrag stimuleert door kennis en vaardigheden voor ondernemer-

schap en de toegang tot financiering te verbeteren, en de administratieve lasten te verminderen. Zonder de stap naar zelfstandig ondernemerschap te maken is ambitieus zelfstandig ondernemerschap immers onmogelijk. Beide landen bieden ook al op groei georiënteerd ondernemerschapsbeleid. Deze studie maakt dat beleid niet overbodig; de bevindingen impliceren met name dat complementaire interventies extra aandacht verdienen.

Vooral in de sfeer van de derde en vierde transitie moeten beleidsmakers zich bewust zijn van het afwijkende en complementaire karakter van beleidsinterventies ten opzichte van de eerste twee transities (zie tabel I.2). Voor het aanwakkeren van zelfstandig ondernemerschap kan beleid tamelijk breed worden ingezet – bijvoorbeeld met algemene programma's voor ondernemerschapsonderwijs, voorzien in rolmodellen, en belastingaftrek voor zelfstandigen. Om de derde en vierde transities te stimuleren moet beleid selectiever zijn. Hierbij gaat het niet om meer mensen ondernemer te laten worden, maar om de juiste mensen ondernemer te laten worden. Het gaat niet om het verhogen van het aantal nieuwe ondernemingen, maar om het verhogen van de kwaliteit van nieuwe ondernemingen. Om de doelgroep af te bakenen en te ondersteunen zullen ook vaker publiek-private partnerschappen moeten worden gesloten. Hierbij moet vooral worden gedacht aan advies bij radicale organisatieveranderingen gedurende de levensloop van jonge ondernemingen, evenals advies voor groei, innovatie en internationalisering.

Tabel I.2: Onderscheid tussen generiek en ambitieus ondernemerschap

Beleidsdoel	**Generiek ondernemer-schapbeleid**	**Ambitieus Ondernemerschapbeleid**
Algemeen	Kwantiteit	Kwaliteit
Ondernemers	Stimuleren van starters	Stimuleren van juiste starters
Bedrijven	Vergroten van het aantal bedrijven	Vergroten van de kwaliteit van bedrijven
Operationele omgeving	Faciliteren van "startups" en bedrijfsuitoefening MKB	Faciliteren van bedrijven met groei
Aangewende middelen	Veelal publieke middelen	Publiek-private partnerschappen
Verdeling van de middelen	Relatief weinig naar veel ontvangers	Relatief veel naar weinig ontvangers
Fiscale instrumenten	Verlagen BTW, starters-aftrek, en zelfstandigen-aftrek	Opvangen van mogelijke klappen die gepaard gaan bij groeispurten
Typische methoden voor steun	Algemeen advies voor starten en besturen van een bedrijf	Advies van experts over innovatie, groei en internationale handel

Bron: Gebaseerd op Autio et al. (2007).

In tegenstelling tot traditioneel ondernemerschapsbeleid moet ambitieus ondernemerschapsbeleid zich focussen op enkele 'high potentials', eerder dan de middelen te spreiden over individuen die enkel de ambitie hebben om zelfstandig te zijn. Terwijl voor de tweede transitie nog de gehele volwassen bevolking als mogelijke doelgroep geldt, behoort in de tweede en derde transitie slechts een zeer beperkt deel van de bevolking tot de doelgroep. Immers: slechts een klein aantal ondernemingen heeft de potentie om substantieel door te groeien, en juist deze selecte

groep wordt met veel problemen geconfronteerd. Met beperkte publieke middelen speelt hier de afweging of (a) grote sommen ingezet moeten worden op een selectief aantal ambitieuze ondernemers, of (b) kleine sommen verdeeld moeten worden onder een groot aantal zelfstandige ondernemers. De eerder genoemde complementariteit, ook weergegeven in Tabel I.2, kan dan aanleiding geven voor een dilemma.

Als voor de eerste optie wordt gekozen, blijft het keuzeprobleem op welke ondernemers het beleid zich moet richten. Veelbelovende ondernemingen (en hun ondernemers) zijn waarschijnlijk goed bekend in een kleine kring van branchegenoten. Het kan dus nuttig zijn om 'business angels', bedrijfstakexperts, toeleveranciers en/of klanten te betrekken bij het identificeren van ambitieuze ondernemers. Ook kunnen deze worden opgespeurd met "up-to-date" databestanden die de populatie van jonge ondernemingen weergeven. Om toegelaten te worden tot programma's moet expliciet een groeiambitie benoemd zijn die ook uit een meting van intrinsieke motivatie naar voren komt (zie de hoofdstukken 4 en 5). Zelfs al is de intentie tot groei geen garantie op succes, groei zonder intentie daartoe is extreem zeldzaam. In de aller-vroegste fasen van het leven van een onderneming moeten vooral groeioriëntatie en flexibiliteit worden benadrukt – in lijn met de derde transitie. Naarmate een onderneming langer bestaat, des te tastbaarder moet het bewijs worden van het groeipotentieel van de onderneming. Bij stimulering van de vierde transitie tot slot, moet marktsucces waarneembaar aangetoond kunnen worden. Dit moet als criterium voor deelname aan programma's worden gebruikt.

BELEID VOOR AMBITIEUS ONDERNEMERSCHAP: ONDERWIJS EN PUBLIEKE KENNIS

Opleiding in vroege levensfases is cruciaal

Prestatiegerichtheid en een positieve houding ten opzichte van ondernemerschap zijn geen gegeven karaktertrekken, maar kunnen worden ontwikkeld, voornamelijk op jongere leeftijd. Dit betekent dat het primaire en secundaire onderwijs belangrijker worden – bijvoorbeeld om de voorkeuren, kennis en vaardigheden van jongeren te beïnvloeden. Dit betekent bijvoorbeeld ook dat ervoor moet worden gezorgd dat ondernemende rolmodellen bekend zijn.

Ondernemerschapsonderwijs is ook relevant voor ambitieuze ondernemers

We benadrukten al eerder het belang van het stimuleren van ambities in het primaire en secundaire onderwijs. Voor de derde en vierde transitie is daarnaast professionele educatie belangrijk. Voor de ontwikkeling van de ambitie om een nieuwe onderneming te laten groeien, innoveren of internationaliseren zijn de kennis en vaardigheden van individuen van groot belang (zie hoofdstukken 3 en 6). Gemiddeld genomen presteren hoogopgeleide ondernemers beter dan laagopgeleide ondernemers, en hebben ondernemers ook hogere opbrengsten uit onderwijsinvesteringen dan werknemers. Ook op macroniveau bestaat een positief verband tussen het aantal hoogopgeleiden en het aantal snelgroeiende ondernemingen. Verdere uitbreiding en intensivering van ondernemerschapsonderwijs op universiteiten en professionele opleidingen lijkt dus ook nuttig voor het stimuleren van ambitieus ondernemerschap

Publieke investeringen in kennis

De overheid kan een directe en een indirecte rol opnemen als het gaat om het investeren in kennis, wat de mogelijkheden voor ambitieuze ondernemers zal vergroten. Door te investeren in publiek onderzoek wordt de kennisbasis voor ondernemerschapskansen in de maatschappij direct verbreed: wetenschappelijk onderzoek heeft vaak geleid tot allerlei toepassingen die door nieuwe ondernemingen zijn ontwikkeld en verspreid. Een andere manier om direct invloed uit te oefenen is via het (nog meer) open stellen van overheidsopdrachten met innovatiedoeleinden aan nieuwkomers op de markt, bijvoorbeeld via het "Small Business Innovation Research"-programma in Nederland, en het programma rond Innovatief Aanbesteden in Vlaanderen.

BELEID VOOR AMBITIEUS ONDERNEMERSCHAP: ARBEIDSMARKT

Flexibilisering van de arbeidsmarkt

Werknemersbescherming beïnvloedt ambitieus ondernemerschap via de opportuniteitskosten van ondernemerschap (of het gaan werken voor een veelbelovende nieuwe onderneming). Ambitieuze werknemers zullen in omstandigheden met sterke werknemersbescherming niet zo snel hun veilige baan opzeggen voor een zeer onzeker bestaan als oprichter van een nieuwe onderneming. Daarnaast zal werknemersbescherming het voor ambitieuze ondernemers lastig maken om werknemers aan te nemen, omdat het moeilijk kan zijn om ze te ontslaan in slechte tijden. Kortom, flexibilisering van de arbeidsmarkt kan ambitieus ondernemerschap faciliteren.

Focus op individuen met hoge opportuniteitskosten

Domeinspecifieke ervaring is een belangrijke determinant van ambitieus ondernemerschap (zie hoofdstukken 3 en 5). In zowel de literatuur over zelfstandig ondernemerschap als die over "intrapreneurship" vinden we bijvoorbeeld dat managementervaring ondernemend gedrag en groeioriëntatie positief beïnvloedt. Ervaring in de bedrijfstak is ook van belang voor het overleven van nieuwe ondernemingen en hun groei. Groeigeoriënteerde ondernemers zijn relatief vaak hoogopgeleid en tamelijk welvarend qua huishoudensinkomen (zie hoofdstuk 5). Dit betekent dat niet elke nieuwe ondernemer even belangrijk is voor ambitieus ondernemerschap, maar dat de focus op een specifiek type individu gericht moet zijn, namelijk die individuen die het meeste te verliezen hebben als zij de stap naar het ondernemerschap zetten (dat wil zeggen: hoge opportuniteitskosten hebben), maar ook het meeste nieuwe waarde kunnen creëren. Dit betekent dat beleid voor ambitieus ondernemerschap zich beter op hoogopgeleide individuen met management- en bedrijfstakervaring kan richten, met het oogmerk de overstap naar ondernemerschap voor hen aantrekkelijker te maken. Deze individuen zijn misschien minder gemakkelijk over te halen om zelfstandige te worden, maar ze zijn waarschijnlijk wel meer geneigd om een nieuwe onderneming te laten groeien. Het ondersteunen van deze potentieel ambitieuze ondernemers lijkt een zeer effectieve beleidsrichting.

BELEID VOOR AMBITIEUS ONDERNEMERSCHAP: BINNEN ORGANISATIES

Ambitieus ondernemerschap is niet alleen in de context van zelfstandig ondernemerschap te vinden: ook intrapreneurship en publiek ondernemerschap kunnen verschijningsvormen van ambitieus ondernemerschap zijn. Als informele instituties een flexibele arbeidsmarkt belemmeren (en het veranderen van formele instituties

onmogelijk lijkt), kan het een "second-best" oplossing zijn om intrapreneurship te stimuleren om zodoende het gebrek aan zelfstandige ambitieuze ondernemers te compenseren en om het aanwezige ondernemende talent toch te laten floreren. De determinanten van intrapreneurship – wat in vergelijking met zelfstandig ondernemerschap vaker ambitieus ondernemerschap bevat – komen in grote mate overeen met de determinanten van zelfstandig ondernemerschap (vooral qua karaktertrekken, demografische kenmerken en cognitieve vaardigheden). Intrapreneurship wordt wel geconditioneerd door een andere context, waarin in het bijzonder de intra-organisationele omstandigheden een belangrijke rol spelen. Veel organisaties lijken zich nog niet te realiseren dat zij hun werknemers op een andere manier kunnen aansturen die nieuwe waardecreatie stimuleert. Een eerste uitdaging voor beleidsmakers is dan ook om organisaties bewust te maken van het potentieel van intrapreneurship. Tegelijkertijd kunnen beleidsmakers ook zelf het goede voorbeeld geven door in hun eigen organisaties (de publieke sector) zogenaamd publiek ondernemerschap te stimuleren. Dit kan op diverse manieren worden gerealiseerd, bijvoorbeeld door het delen van informatie over goed werkende praktijken op dit terrein, en via adviesdiensten ten aanzien van belangrijke aspecten van strategie, management, organisatie, financiering en risicomanagement met betrekking tot intrapreneurship.

Werkgevers hebben waarschijnlijk een ambivalente houding ten opzichte van intrapreneurship. Aan de ene kant kan hun organisatie profiteren van het ondernemende gedrag van hun werknemers. Aan de andere kant kunnen ze juist hun meest getalenteerde personeel verliezen omdat ze – als ze eenmaal de smaak te pakken hebben – hun eigen onderneming kunnen starten. Dit laatste is misschien

goed voor de economie als geheel, maar slecht voor de voormalige werkgever. Een belangrijk obstakel voor ambitieus zelfstandig ondernemerschap in deze context is het concurrentiebeding, dat het onmogelijk kan maken om de werkgever te verlaten om een innovatieve onderneming te starten.

ONDERZOEKSAGENDA

In dit rapport wordt de huidige stand van zaken met betrekking tot onderzoek naar ambitieus ondernemerschap besproken en samengevat. De uitkomsten uit dit onderzoek bieden een basis voor de bovengenoemde beleidsrichtingen. Met name het onderzoek naar de effecten van de institutionele omgeving op ondernemerschap biedt veel aanknopingspunten voor beleid, mede omdat beleid voor een groot deel bestaat uit het bekrachtigen en veranderen van formele instituties. In de studie komen ook de beperkingen van het huidige onderzoek naar voren. Met name het onderzoek naar prestatiegerichtheid is nog zeer versnipperd, en er is ook nog een gebrek aan longitudinaal onderzoek naar de oorzaken van ambitieus ondernemerschap, onderzoek naar de keuze voor de diverse vormen van ambitieus ondernemerschap (zoals intrapreneurship en publiek ondernemerschap) en de diverse vormen van nieuwe waardecreatie.

CHAPTER 1

INTRODUCTION

The Netherlands and Belgium are said to lose momentum as leading knowledge-based economies. There have been many debates as to what explains this and what policies might therefore have to be implemented. Key ingredients in gaining leadership in knowledge-based economies are not only investments in knowledge (through, e.g., R&D and education), but also creating and capturing value out of these knowledge investments. The current debate on "knowledge valorisation" and knowledge transfer in Belgium, the Netherlands and other knowledge-based economies has emphasized "unused potential" as the key issue to tackle in economic policy – for example, by stimulating university spin-off ventures and university-industry collaboration. The assumed underlying logic is that countries like Belgium and the Netherlands have an excellent knowledge base that provides numerous business opportunities that are not pursued effectively or not at all. In this report, we do not deny the relevance of this unused potential, but we suggest that recognizing a lack of ambition to create value in society might be a more relevant angle for new policy directions. New value creation is realized by individuals who not only identify opportunities for innovation, but who also pursue those opportunities ambitiously and effectively. In order to achieve this on a large scale, ambitious entrepreneurs are needed, and not people who just want to be their own boss and nothing more. Recent research findings suggest that ambitious entrepreneurship is a more important driver of economic growth than new firm entry or self-employment per se (Bosma, 2009; Stam et al., 2009; 2011; Stam & Van Stel, 2011; Valliere & Peterson, 2009; Wong et al., 2005). This is also recognized in recent policy documents, emphasizing the importance of the quality of entrepreneurship next to the aim of increasing the quantity of entrepreneurship (EIM, 2008; EWI, 2010).

Belgium and especially the Netherlands have relatively high levels of self-employment, but reveal comparatively low levels of really growth-oriented and innovative entrepreneurship (also see Chapter 9). One can perceive this as the inevitable result of an affluent society, in which self-realization is more important than changing the world by being an ambitious and hard-working entrepreneur. Such a society is dominated by mediocrity and self-sufficiency, and a low need for achievement. It might also be argued that the causes are not so much cultural, but are a consequence of fewer opportunities in relatively stagnant macro-economies. In this report, we will not take such perceptions as a given, but will provide a thorough study into the nature and causes of ambitious entrepreneurship. Next to the study of ambitious entrepreneurship, we will also report on studies that explain the subsequent step of the growth of the new firm, and the macro effects of different types of entrepreneurship. These insights will provide a foundation for improving public (entrepreneurship) policy for a prosperous knowledge-based society that can successfully face future challenges.

1.1 WHAT IS (AMBITIOUS) ENTREPRENEURSHIP?

Some people have the intention to become an entrepreneur, and some do not. What drives this entrepreneurial intention? Moreover, some entrepreneurs seek growth or aim to be innovative, whereas others do not. What can explain these differences? And again others, who are overly ambitious and may be equipped with entrepreneurial talents and skills, never consider achieving their ambitions through entrepreneurship. What does determine these individual differences in ambition? Ambition alone is not enough, though. Many ambitious (would-be) en-

trepreneurs never achieve their dreamed objectives. Why are some people better able to live their dream than others? These micro-level issues have their mirror image at the macro level, as some countries feature much more entrepreneurial activity than others and as the nature of entrepreneurial activity differs widely across countries. Why is entrepreneurial activity so much more pronounced in some countries than in others, and what explains cross-country differences in high-growth and innovative entrepreneurship? In the multidisciplinary field of entrepreneurship studies, these and other questions take center stage. But before these and other questions can be examined, it must be very clear what is meant by entrepreneurship and ambitious entrepreneurship. In this section, therefore, we will provide a brief overview of definitions of entrepreneurship, generally, and of ambitious entrepreneurship, particularly.

ENTREPRENEURS AND ENTREPRENEURSHIP

Entrepreneurship has long intrigued economists, psychologists, sociologists, business scholars and politicians alike. Consequently, a great deal has been written on the subject. Each author approaches the subject matter from the perspective of her or his own discipline, resulting in both convergence and divergence on various aspects of interest in the extant body of knowledge concerning entrepreneurs and entrepreneurship. Despite the fact that entrepreneurship has long been a topic of research interest, there is still, remarkably, disagreement about what entrepreneurship is and who entrepreneurs are (Low & MacMillan, 1988; McDougal & Oviatt, 2000; Shane & Venkataraman, 2000; Venkataraman, 1997). Indeed, to date, a wide variety of different definitions of entrepreneurship have been proposed.
Classic definitions are those offered by Knight and Schumpeter. Knight (1921) pro-

vided an early definition of an entrepreneur as someone who undertakes uncertain investments and bears all of the associated risks[1]. Schumpeter (1934) argued that entrepreneurs play a central role in furthering economic progress with their innovative contributions to the "process of creative destruction", and with their "new combinations", which he viewed as defining characteristics of capitalism.

Leibenstein (1968) conceptualized the entrepreneur as an arbitrageur. From this perspective, entrepreneurs fill gaps in the market or connect existing markets in a novel way; they combine resources in a novel way to produce new products or services; or they may arrange and deploy organizational resources in a novel structure, resulting in a new organizational form (Amit et al., 1993). Similarly, the entrepreneur plays the role of arbitrageur, according to Kirzner (1973), by anticipating opportunities arising from market imperfections (Low & MacMillan, 1988). Cole (1968), as cited in Low and MacMillan (1988: 2), defined entrepreneurship as "purposeful activity to initiate, maintain, and develop a profit-oriented business." Similarly and more recently, Gartner (1985) defined entrepreneurship as "new venture creation", resulting in the establishment of new organizations. Extending the prior work of Venkataraman (1997)[2], Shane and Venkataraman (2000: 218) have defined entrepreneurship as a process by which "opportunities to create future goods and services are discovered, evaluated, and exploited."

In the current entrepreneurship literature, two broad interpretations are dominant: an occupational and a behavioural one (Davidsson, 2004; Stam, 2008; Sternberg & Wennekers, 2005). The occupational interpretation refers to the phenomenon that some people, rather than working for somebody else under an employment contract, strike out on their own and become self-employed. This interpretation

[1] In this definition, uncertainty aversion (and not risk aversion) inhibits entrepreneurship.

[2] Venkataraman (1997: 119) proposed that scholars working in the field of entrepreneurship research should strive to reach an understanding of "how opportunities to bring into existence 'future' goods and services are discovered, created, and exploited, by whom, and with what consequences."

forms the cornerstone of the occupational choice literature that has emerged from the labour economics perspective on entrepreneurship. The occupational choice literature merely departs from an individual's one-off decision based on evaluating a utility function determined by expected rewards (monetary and non-monetary) and perceived risks of two occupations: self-employed or employed. To a large extent, the occupational interpretation can therefore be connected to "self-sufficient entrepreneurship". The behavioural interpretation refers to the development and renewal of any society, economy or organization, which is based on micro-level actors who take initiative and make change happen. This closely connects to the definition of Shane and Venkataraman (2000) of entrepreneurship as the identification, evaluation and pursuit of entrepreneurial opportunities – i.e., opportunities to bring into existence new goods, services, markets, supply sources, and organizing methods (see Schumpeter, 1934: 66). Definitions 1 and 2 below relate to this perspective[3]. The context of this behaviour is not limited to a situation in which ownership and management are bundled (like in self-employment), but also includes entrepreneurial behaviour by employees in established organizations (intrapreneurship), and might also take place in the public sector. This is why we review the literature on intrapreneurship in Chapter 3.

In this report, we emphasize the behavioural and process perspectives on entrepreneurship, and adopt the following definition of this widely studied and publicized phenomenon.

[3] Most empirical applications in the occupational choice literature do not consider ambitious types of entrepreneurship. It is for this reason that we do not pay substantial attention to the occupational choice literature in this report, given the research question outlined in this Chapter 1. This body of literature might benefit from appreciating different types of entrepreneurship as well as different phases of entrepreneurship – and recognizing that evaluations may differ along different moments in the career of an individual.

> ***Definition 1:*** *Entrepreneurship is a process by which opportunities to create future goods and services are discovered, evaluated, and exploited*[4].

This definition combines risk-taking and risk-bearing with innovative behaviour, but does not necessarily link this behaviour to the creation of a (viable) new enterprise. All of these elements were variously emphasized and fragmented in previous competing conceptualizations of entrepreneurship. What distinguishes this contemporary definition of entrepreneurship from earlier ones is that it (a) views entrepreneurship as a creative process and (b) does not necessarily imply the establishment of a new firm. This implies, for instance, that intrapreneurship and public entrepreneurship are captured by this definition as well (see footnote 4).

AMBITIOUS ENTREPRENEURSHIP

Having established a definition of entrepreneurship, we must now further differentiate (highly) ambitious entrepreneurs from their less or non-ambitious counterparts. According to the *Oxford Dictionary*, ambition is the "determination to succeed." Spenner and Featherman (1978) argue that ambition can be defined as a class of psychological orientations held with respect to two types of achievement: *role-residing* achievement and achievement as to *performance*. Role-residing achievement involves the ways in which certain roles are related to prestige and, more generally, to levels of remuneration, job security and other rewards[5]. Performance

[4] This definition includes intrapreneurship, or intra-organizational entrepreneurship, which is discussed in Chapter 3, and even public or social entrepreneurship, as the opportunities might also concern public goods and services. Some prefer to restrict the entrepreneurship label to behavior that involves establishing an own private business venture. Then, Definition 1 would read as follows: Entrepreneurship is a process by which opportunities to create future goods and services are discovered, evaluated and exploited, and result in the establishment of a new business venture.

[5] This is reflected in, for example, Baumol's (1990) definition of entrepreneurs as persons who are ingenious and creative in finding ways that add to their own wealth, power and prestige.

achievement includes, for example, grading of students, and monetary, status and social attainments of adults through their economic activities – i.e., their accomplishments as assessed against standards of performance. The understanding of ambition has evolved – through related concepts like aspiration, expectancy and motivation – into an understanding of ambition as a set of attitudes held by an actor in relation to certain classes of objects in specific situations – especially competitive ones (Spenner & Featherman, 1978). Putting this in the entrepreneurial context, ambitions may reflect the orientations with respect to the wish to *be* an entrepreneur, with all the rewards attached to this status, by the individual ("I would like to be independent") and/or the orientations with respect to the wish to *perform well* as an entrepreneur (as reflected, e.g., in making money, hiring employees, making a career within an organization, and contributing to society or the local environment). Both the role-residing type and performance type of achievement matter for the discussion of ambitious entrepreneurship, as will become clear in Chapter 4. However, this report on ambitious entrepreneurship focuses on the latter type of achievement.

Studies that have explicitly or implicitly investigated ambition among entrepreneurs have focused on the (firm) growth ambitions of entrepreneurs. Using firm growth as a yardstick for measuring entrepreneurial ambition has, however, proven to be problematic, to the extent that growth can be measured in a number of ways (e.g., with sales, employment, profit and asset growth). This makes the comparability of such studies difficult (see, for example, Delmar et al., 2003; Shepherd & Wiklund, 2009). Furthermore, and following the above reasoning, entrepreneurial ambition can be measured in other ways besides firm growth, such as the societal contribution made by the firm (see Davidsson, 2004; Venkataraman, 1997).

In their study of "ambitious" female entrepreneurs in the United States, Gundry and Welsch (2001) characterize ambitious entrepreneurs as being "high-growth oriented", where growth is measured by growth in sales revenue. More specifically, ambitious entrepreneurs are described as having a high commitment to entrepreneurial success. This commitment is composed of "entrepreneurial intensity" – defined as the "degree to which entrepreneurs are willing to exert maximum motivation and effort towards the success of their venture" (Gundry & Welsch 2001: 460)[6] – and the willingness to incur the opportunity costs of their strategic pursuits[7]. The authors found that scores on entrepreneurial intensity and opportunity costs could successfully predict the high-growth or low-growth orientation of the entrepreneurs sampled.

While the results of this research found strong support for a causal link between high commitment to entrepreneurial ambitions and realized success along a number of dimensions, the study does not shed light on why some entrepreneurs have relatively high commitment to entrepreneurial success whilst others have relatively low commitment. Thus, the question remains: Why are some entrepreneurs more ambitious than others? How can we account for the apparent differences in their underlying motivations and incentives that lead some entrepreneurs to be content with a modestly successful business, while others strive for greater success?

In this report, we are specifically interested in the study of ambitious entrepreneurship. By combining the definition of entrepreneurship proposed by Shane and Venkataraman (2000) and Gartner (1985) with the definition of ambitious

[6] Emphasis is placed on the strategic growth and expansion intentions of the entrepreneur, which were defined as the degree to which entrepreneurs intend to actively engage in specific strategies to grow and expand their firms, with adding a new product or service, expanding operations, selling to a new market, and applying for a loan to expand operations (Gundry & Welsch, 2001: 460).

[7] Opportunity costs were operationalized as the extent to which entrepreneurs are willing to incur personal and professional sacrifices for the sake of the venture (Gundry & Welsch, 2001: 460).

entrepreneurship suggested by Gundry and Welsch (2001), we conceptualize an ambitious entrepreneur as one who identifies and exploits opportunities to create new products, services, processes and organizations with high aspirations to achieve entrepreneurial success –i.e. , to maximizing value creation (beyond self-sufficiency)[8].

> ***Definition 2:*** *An ambitious entrepreneur is someone who engages in the entrepreneurial process with the aim to create as much value as possible[9].*

It should be noted that goals set by ambitious entrepreneurs should be obtainable if they are to realize the expected success (cf. McClelland 1961). We extend Gundry and Welsch's focus on high-growth orientation (where growth is measured either in terms of total sales revenues or employment creation), and argue that any measure of entrepreneurial ambition should also include an innovation-orientation dimension[10]. The reason for this is that innovation is at the very heart of the well-established Schumpeterian tradition in entrepreneurship; an entrepreneur who brings an innovation to the marketplace offers a key value-generating contribution to economic progress[11]. This also connects to the recent studies on the growth of

[8] In the strategic management literature, this translates into the creation of "competitive advantage": the result of producing goods or services that create more value for customers than those of rivals (see Hitt et al., 2001). In this literature, "strategic entrepreneurship" is the integration of entrepreneurial (i.e., opportunity-seeking actions) and strategic (i.e., advantage-seeking actions) perspectives to design and implement entrepreneurial strategies that create value (Hitt et al., 2001).

[9] Again, for a definition that captures private entrepreneurship alone, and that not includes intrapreneurship or public entrepreneurship as well, we would have: *An ambitious entrepreneur is someone who engages in the entrepreneurial process and operates a new private business venture with the aim to create as much value as possible*.

[10] This reflects Carland et al.'s (1984: 358) distinction between an entrepreneur and a small business owner, whereby the entrepreneur is characterized by his or her innovative behavior and the entrepreneurial venture is characterized by its innovative strategic practices.

[11] Moreover, growth in absolute terms could be further differentiated to distinguish between domestic growth ambitions and international growth ambitions. This would offer the opportunity to evaluate the entrepreneurial contribution to globalization and the competitive advantage of nations (cf. Porter, 1990). In this report, we ignore this aspect of entrepreneurial value creation.

young innovative companies (Schneider & Veugelers, 2010; Veugelers, 2009) and the subsequent young leading innovators (Veugelers & Cincera, 2010), and the relative weaknesses of Europe (in comparison to the US) to facilitate these firms to enhance innovation and economic development.

Furthermore, our definition of ambitious entrepreneurship is unique in that it explores the factors that underlie ambition as such. The adjective "ambitious" implies that an ambitious entrepreneur is differently motivated than her or his non-ambitious counterpart. Hence, deeper insight into the issue of motivation is needed. Therefore, in Chapter 4, we will provide a review of what might be called a motivation perspective of ambitious entrepreneurship. We explore the link between motive dispositions of individual entrepreneurs and their value creation orientation. But before doing so, we will present the key transition points and effects involved in the study of ambitious entrepreneurship.

1.2 TRANSITIONS TOWARDS AMBITIOUS ENTREPRENEURSHIP

Three fields of interest can be distinguished that study the abovementioned questions, each of them having a different focal level of analysis. The first one, presented in Table 1.1, is the central focus of this study and perhaps the least prominent in current entrepreneurship research. It emphasizes the achievement ambitions and motivations by individuals when it comes to entrepreneurship. It relates to (i) attaching importance to the role of being an entrepreneur – entrepreneurial *role-residing* achievement ambitions - and (ii) attaching importance to performing (more than) well – *performance* achievement motivations[12].

[12] We assume that individuals with high performance achievement ambitions have the ambition to create value. However, whether this increases aggregate welfare in society is an empirical question (see Table 1.3).

Individuals that are motivated by both types of achievement are ambitious entrepreneurs. Different transitions can be distinguished in Table 1.1. Starting at the lower left corner, two transitions can be recognized: from individuals without entrepreneurial role-residing and performance achievements (as member of affluent society with no achievement motivation) to an individual with a performance achievement motivation, and from individual with no achievement motivation to an individual with entrepreneurial intentions[13]. Here, pull and push factors can be distinguished. According to the theory of planned behaviour (see Chapter 2), developing entrepreneurial intentions is an important condition for the decision to enter as an entrepreneur. These entrepreneurial intentions are mainly driven by social norms, personal attitudes and self-efficacy. There are a large number of studies explaining (the level of) latent and nascent entrepreneurship from a micro and macro point of view (studying the direct transition from the general population to the subpopulation of those with entrepreneurship intention). In Chapter 2, the focus is on reviewing the literature on entrepreneurial intention, and how this translates into entrepreneurial behaviour.

Table 1.1: Individual-level motivation transitions

	Entrepreneurial role-residing achievement motivation	
Performance achievement motivation	Low	High
High	General performance ambitions	Ambitious entrepreneurship
Low	No entrepreneurial role-residing and performance achievement	Entrepreneurial intentions

[13] The latter role-residing orientation can be realized through becoming an entrepreneur in the occupational sense (owning and managing a new venture) and as intrapreneur.

For those individuals with high ambition (performance achievement motivation) but without entrepreneurial intentions, involvement in entrepreneurship may just come in their path unexpectedly. An ambitious individual who does not develop entrepreneurial activities, is involved in high-ambition non-entrepreneurship. If this person possesses the talent, skills and resources relevant to ambitious entrepreneurship, this can be characterized as latent ambitious entrepreneurship. Ambition closely matches with one of the classical concepts in the psychology of entrepreneurship, namely the need for achievement. Need for achievement (*n* Ach) is seen as a distinct human motive that is different from other needs. Achievement-motivated people have certain characteristics in common (McClelland, 1961): the capacity to set high personal but obtainable goals; the concern for personal achievement rather than the rewards of success; and the desire for job-relevant feedback (how well am I doing?) rather than for attitudinal feedback (how well do you like me?). According to McClelland (1961), the *n* Ach is not a given trait, but can be developed; according to Spenner and Feathermen (1978), it is mostly shaped during adolescence and youth. Both ambition and *n* Ach leave open what is to be achieved, and to what level. With respect to the last aspect, the adjective "ambitious" refers to being full of ambition (of any kind) or high aims (so more than the 'average' aim): this might mean that referring to *high* ambition is tautological. Need for achievement is somewhat more explicit here by emphasizing high but obtainable goals. In addition, we make a distinction between performance achievement motivation and role-residing achievement motivation (see Table 1.1). In the literature review, we will take need for achievement – or, more broadly, the motivational perspective on entrepreneurship – as our starting point in Chapter 4. Finally, there is the transition from entrepreneurship to entrepreneurship with

the ambition to create value beyond self-sufficiency. Not all entrepreneurs are ambitious. In effect, many are not. This is clear from the many self-employed who simply want to be self-sufficient, without any ambition to grow or to be innovative. In contrast to soccer coaches, who always have the intention to win a game, entrepreneurs often have no intention to grow their business. This growth intention, or ambition, is an empirical indication of value creation beyond self-sufficiency. The central transition here concerns the shift from entrepreneurship without to entrepreneurship with the ambition to create value beyond self-sufficiency. In Chapter 5, we review the literature on entrepreneurial growth ambition.

The above logic can be applied to macro issues at the level of nation-states as well. Then, Table 1.1 deals with the prevalence of particular types of motivated individuals in society.

1.3 TRANSITIONS TOWARDS FIRM GROWTH

The second field of interest sets out growth aspirations (one of the possible reflections of ambitious entrepreneurship) against the available resources and opportunities. It is well documented that (i) only a minority of the new firms develops into substantial firms and (ii) having growth ambitions is perhaps close to a necessary, but certainly not a sufficient condition for subsequent *realized* growth. A study by Wiklund and Shepherd (2003) confirmed that small business managers' growth intentions are positively related to subsequent growth, but also revealed that this relation appears to be more complex than that: education and experience of the small business manager, as well as environmental dynamism, magnify the effect that one's growth intentions have on the realization of growth – i.e., these factors

positively moderate the effect of growth intentions on subsequent growth realizations. This leads to Table 1.2's typology.

Table 1.2: Organizational-level transitions

	Growth aspirations	
Resources and opportunities	Low	High
High	Unused potential	Actual growth
Low	Little potential	Constrained

Growth is the operational measure of new value creation. Key here is to define what is meant by "value". After all, the revealed effect of entry into entrepreneurship might be good or bad, or relatively neutral, the assessment depending on the stakeholders involved. Effects can only be qualified as "good" when some (new) value is created or "bad" when value is destructed. Some authors in the field of entrepreneurship studies define entrepreneurship as being "new value creation" (Bruyat & Julien, 2000; Fayolle, 2007), while others do not assume entrepreneurship to be "productive", but leave open the possibility of entrepreneurship being "destructive" or just "unproductive" (Baumol, 1990). In addition, entrepreneurs with value ambition can be unsuccessful in realizing value creation ("constrained" or "lingering" entrepreneurship), which would still qualify them as (unintended) unproductive entrepreneurs. There are multiple reasons for why the intended value creation is not realized – for example, due to a lack of skills of the entrepreneur and capabilities of the firm, external constraints in the acquisition of resources (finance, personnel, supplies, et cetera) and insufficient market demand. An operational definition of value realization in the context of ambitious entrepre-

neurship is the following: "someone who starts a new firm and expands it"[14]. This operational definition is central in Chapter 6, in which we will review the literature on entrepreneurial (employment) growth realization, focusing on individual and firm-level determinants.

1.4 MACRO-LEVEL EFFECTS

While it is hard to affect individuals' achievement ambitions in the short term, and hence in this report we mostly treat this as given, something can be done to provide a context that enhances the perceived opportunity (or even the necessity) for a certain entrepreneurial achievement. Such a context could, through self-reinforcing achievement mechanisms based on role residing and performance, result in increases in individuals' entrepreneurial ambitions in the longer term. The third field of interest indeed examines the contextual situation in more detail: it plays a crucial role in transferring micro-level entrepreneurial performance to success at the macro or societal level. This connects to Baumol's (1990) thesis that the set of rules and codes of conduct in society determine to what extent entrepreneurial activity is productive, unproductive or even destructive for society, as summarized in Table 1.3.

Table 1.3: Macro-level effects

	Macro effect	
Micro performance	Neutral/negative	Positive
High	Redistributive / destructive ventures	Productive success ventures
Low	Self-sufficient / failed ventures	Catalyst ventures

[14] Thanks to David Storey for making this suggestion. One might even make the operational definition less extensive, as "someone who starts a substantial new firm" (see Bos & Stam, 2011), leaving open whether the new value is created in a very short period after start-up, or on a longer term.

Unproductive entrepreneurship can have two faces: redistributive (or rent-seeking) or self-sufficient entrepreneurship. Redistributive entrepreneurship has a rather negative connotation, in that it involves rational individual behaviour to reallocate resources for self-enrichment. Self-sufficient entrepreneurship has a more neutral, and sometimes even positive, connotation: it means that individuals are able to earn a living – and, in more extreme circumstances, that they are able to reduce poverty.

We distinguish four possible macro effects. First, entrepreneurs may create relatively little value for themselves (e.g., as (part-time) self-employed) and society, or even fail to create any value. Second, entrepreneurs might generate much wealth for themselves alone, by redistributing or even distracting wealth in society (e.g., setting up a consultancy to enable clients to make better use of loopholes in the tax system, or by setting up a ponzi scheme). Third, entrepreneurs may produce wealth for themselves, but also new value for society (for example, with developing new technologies that improve the quality of life for citizens, but also improve the income of the founder and the entrepreneur's employees)[15]. Fourth, we have ventures that try out new applications of technologies, but fail to create or capture value for themselves, only delivering new knowledge about technological possibilities for others. The latter type of ventures are called 'catalyst ventures' here; the history of technology is rife with entrepreneurs that tried to apply immature technologies in new products, and failed to turn it into a market success, but provided important knowledge to subsequent entrepreneurial attempts.

Getting back to our initial discussion of ambitions and *n* Ach (see Chapter 4 for much more detail), we can say that entrepreneurship is an activity in which opportunities (for change) are identified, evaluated (value created for the acting

[15] These entrepreneurs not only create a job for themselves (achieve an entrepreneurial role in society), but also generate value in society.

person), and pursued (potentially with value created beyond the personal orbit). Especially the latter element, the possibility to exploit an opportunity, is a necessary condition for people to achieve anything, providing a useful cue for those who possess a high need for achievement. Consequently, those who score high on the need for achievement may be more likely than other members of society to exploit opportunities. In the division of labour in society, ambitious entrepreneurs are specialized in realizing (relatively large-scale) latent opportunities. In contrast to what the wording 'exploit' seems to suggest, this does not necessitate a market setting: opportunities can also be exploited within an organization and within public sector settings. The 'advantage' of a market setting is the availability of the price mechanism and competition to discover and 'objectify' the value of entrepreneurial efforts, which is often more problematic in non-market settings, in which neither prices nor competition might be present. A similar situation occurs with catalyst ventures: these ventures create value, but do not capture the returns, as would be the case in a 'normal' market setting (i.e., they create so-called positive externalities; destructive ventures create negative externalities).

In summary, this report focuses on the determinants of a key ingredient leading to economic development: the prevalence of individuals' ambitions to achieve high but obtainable goals (with respect to a particular – entrepreneurial – role and/or achievement; see Table 1.1). It touches upon, but does not exhaustively study, which resources and opportunities are required to realize these ambitions (Table 1.2), and which contexts apply to transfer micro-level performance into productive societies (Table 1.3). We would like to stress, however, that the transitions in Tables 1.2 and 1.3 will also need to be addressed in developing policy in the field of ambitious entrepreneurship in order to yield maximum (and positive) effects on society.

1.5 OUTLINE OF THIS REPORT AND OVERARCHING TRANSITION MODEL

Based on the abovementioned foci, this report on ambitious entrepreneurship is structured in a series of nine chapters. In Chapters 2 to 7, we will review the literature, focusing on entrepreneurial intention and behaviour (Chapter 2), intrapreneurship (Chapter 3), entrepreneurial motivation (Chapter 4), entrepreneurial growth ambition (Chapter 5), entrepreneurial growth realization (Chapter 6), and contexts of entrepreneurship (Chapter 7). These chapters fit within an analytical transition model of ambitious and high-value generating entrepreneurship[16]. In this model, a series of four transitions is suggested, linked to four relevant outcomes. By way of summary, we will use the insights derived from our literature review to compose explanatory models of ambitious entrepreneurship and directions for further research in Chapter 8. In Chapter 9, we conclude by discussing recent entrepreneurship rates in Flanders and the Netherlands, and future policy directions, with reference to insights from the literature and our transition model.

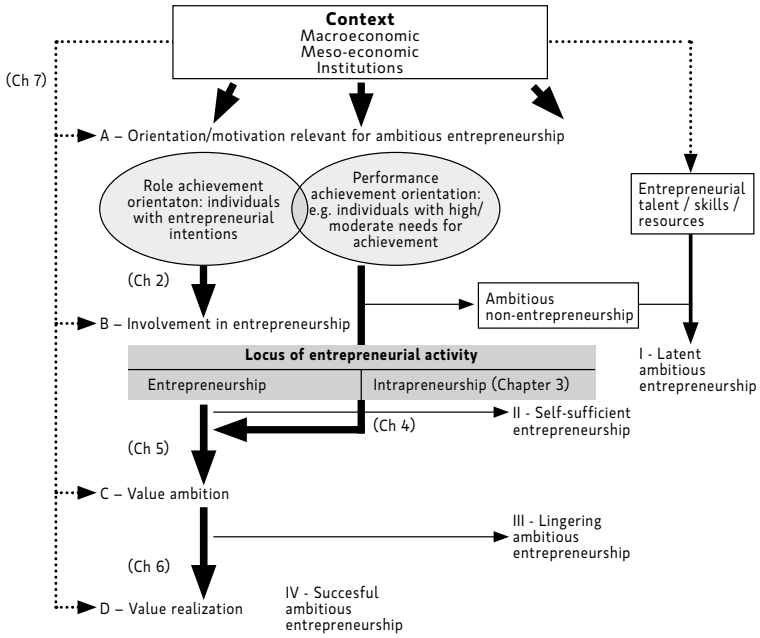
The transitions and outcomes of our model are discussed briefly below, one by one, applied to the micro-level issue of individual entrepreneurship. In advance, one remark is worth making. As said, the model proposed here is of an *analytical* nature and serves to structure this report. In practice, though, the sequential nature of transitions implied by the model may well not hold. Some examples may illustrate this point. First, the causality may run the other way around. For instance, someone without any entrepreneurial intention may develop one if s/he, for one reason or the other (e.g., forced through unemployment or via an inheritance),

[16] In the main text, for the sake of readability, we refer to entrepreneurship only. Moreover, implicitly, this term suggests that the argument is restricted to the private sector. However, the model's applicability is much broader, relating to intrapreneurship and the public sector as well. To signal this, a little table is added in the model's figure under the heading of "entrepreneurial locus".

starts to run her or his own business. Second, an individual may iterate from one stage to the other. E.g., s/he might start her or his own business after a career as an intrapreneur within larger organizations (see Bosma et al., 2011). Third, people may jump immediately to, say, the case of entrepreneurship ambition as running their own business is what they always wanted. For example, in the context of a family business, a young member of the family might be destined to take the helm one day, and be prepared for that early on.
The model is based on the observation that a number of key transitions can be distinguished in the analysis of the emergence of ambitious and high-value generating entrepreneurship. We distinguish four transitions, as visualized in Figure 1.1.

A – From a 'regular' citizen to an individual with an orientation towards ambitious entrepreneurship. The first transition can be unraveled into two questions: (i) the question as to why some people in the wider population are ambitious, whilst others are not; and (ii) why some people would like to become entrepreneurially active. Either both or none may apply to each citizen. Ambitious citizens with entrepreneurial intentions are of particular interest. Thus the first transition selects out those without any entrepreneurial or performance achievement orientation.

Figure 1.1: A transition model of high-value entrepreneurship



B – From non-entrepreneurship to entrepreneurship. The second transition has to do with the realization of an (ambitious) entrepreneurial intention. This role-residing orientation can be realized through becoming an entrepreneur in the occupational sense (owning and managing a new venture) or by becoming active as an intrapreneur. For those individuals with high ambition but without entrepreneurial intentions, involvement in entrepreneurship may just come in their path unexpectedly. An ambitious individual who does not develop entrepreneurial activities, is involved in high-ambition non-entrepreneurship. If this person possesses the

talent, skills and resources relevant to ambitious entrepreneurship, this is labeled as latent ambitious entrepreneurship – outcome I.

C – From entrepreneurship to entrepreneurship with the ambition to create value beyond self-sufficiency. Not all entrepreneurs have the ambition to really create value, either by being innovative or by generating entrepreneurial growth (or both). Entrepreneurs without the ambition to create value engage in marginal (self-sufficient) entrepreneurship – outcome II. The model assumes that individuals with high performance achievement ambitions who engage in entrepreneurship have the ambition to create value.

D – From high-value entrepreneurship ambition to high value entrepreneurship realization. Having the ambition to generate value is one thing, but really creating value is quite another matter. Entrepreneurs who fail to realize their value-generating ambition are involved in lingering entrepreneurship – outcome III; those that do, though, are revealing high-value generating entrepreneurship in the end – outcome IV.

In the wrap-up of this report (chapter 10), we discuss these transitions somewhat more in depth, focusing on the micro level of analysis[17]. The socio-economic context potentially impacts all entrepreneurial processes and transitions mentioned in this chapter. Empirical studies on the impact of the socio-economic context are reviewed in Chapter 7. A substantial part of these studies involves research based on Global Entrepreneurship Monitor data that allows focusing at ambitious types

[17] The logic captured at the micro level in the model can be applied to macro issues at the level of nation-states as well. Then, the model deals with transition rates, rather than individual transitions. That is, then the argument relates to the percentage of the population with entrepreneurial role orientation or performance achievement orientation (A), entrepreneurial involvement (B), entrepreneurial value ambition (C), and the proportion engaging in different types of entrepreneurial activity and realizing their value-generating ambition (D).

of entrepreneurship within a cross-national setting, thus appreciating institutional settings at the national level[18]. By reviewing the literature with reference to our overarching model, we hope to identify key insights and main gaps in our knowledge as to the antecedents of ambitious and high-value generating entrepreneurship, and to provide insights for public (entrepreneurship) policy.

[18] The Global Entrepreneurship Monitor (GEM) was launched in 1999 to facilitate the study of private entrepreneurship in a cross-national setting. This international perspective, adopting a harmonized research methodology, is meant to stimulate the study of differences in entrepreneurial activity across different societies (see, e.g., Reynolds et al., 2005).

CHAPTER 2

ENTREPRENEURIAL INTENTION AND BEHAVIOUR

Understanding entrepreneurship is considered important, because, evidently, economic development is strongly influenced by entrepreneurial activities. Specifically, entrepreneurs generate jobs and introduce innovations in the marketplace, making start-ups an important driver of economic growth and economic progress. Interesting questions can be asked as to why some people feel more attracted to becoming an entrepreneur than others, before turning to issues as to why some entrepreneurs appear to be more successful than others. We will explore the extant literature to gain understanding of why people engage in entrepreneurship in the first place and, if they decide to so, what the 'drivers and impediments' are of their entrepreneurial activities. We do so by reviewing the literature on (a) entrepreneurial intention and (b) entrepreneurial behaviour.

2.1 ENTREPRENEURIAL INTENTION

Theory of planned behaviour

Many researchers have tried to gain understanding of the determinants of entrepreneurial intention and behaviour. A very suitable model in this respect is the theory of planned behaviour. This theory poses that behavioural intentions can be explained by the beliefs people hold about performing this behaviour. These beliefs, which are influenced by a wide variety of background factors such as personality, experience, education, knowledge and so on, can be categorized in three different types of beliefs. First, *behavioural beliefs* (or attitudes) refer to perceived advantages and disadvantages related to the behaviour. These underlie an individual's attitudes toward the behaviour. Second, *normative beliefs* (or norms) refer to the expected approval or disapproval of behaviour by the social environment (friends, family, colleagues, et cetera). These translate into a perceived social norm that will guide behavioural intentions. Third, *control beliefs* refer to the perception of being able or capable to perform the behaviour. These lead to a sense of self-efficacy or perceived behavioural control (Ajzen & Fishbein, 2005).

The validity and predictive power of the theory of planned behaviour have been underscored by many different researchers, in many different contexts, and in several meta-analyses (e.g., Albarracín et al., 2001; Armitage & Conner, 2001; Godin & Kok, 1996; Hagger et al., 2002; Sheeran & Taylor, 1999). Note that researchers have been concerned with extending the theory of planned behaviour as well, by including other factors such as past behaviour, habit and mood. The theory of planned behaviour is a very general model suited to explain behavioural intention. This model has often been used in entrepreneurial research to investigate the de-

terminants of entrepreneurial intention. Below, we present a brief overview of this literature on the determinants of entrepreneurial intention.

Determinants of entrepreneurial intention

In trying to unravel why some people engage in entrepreneurial activity while others do not, researchers have compared entrepreneurs to non-entrepreneurs to find out which traits generally go together with entrepreneurial intention and which do not[19]. In particular, prior work has investigated which personality traits seem to be associated with being an entrepreneur. The personality trait approach has been criticized by researchers, though, for a variety of reasons. The key critique is that entrepreneurship is determined by such a wide variety of factors that the personality traits can have only little impact – and that if they do have an effect, this is in interaction with all kinds of contingencies. Notwithstanding this critical observation, personality variables are now widely believed to be valid and important determinants of entrepreneurial intention and activity.

However, the cumulative evidence from research investigating the relations between broad personality traits, such as the well-known Big Five taxonomy, and entrepreneurial intention and behaviour is inconclusive, at best. Some studies found no differences between entrepreneurs and non-entrepreneurs (e.g., Brandstätter, 1997), whereas other research did found significant differences (e.g., Wooton & Timmerman, 1999). Moreover, the cumulative evidence is far from consistent as to which characteristics are found to distinguish entrepreneurs from non-entrepreneurs. Therefore, researchers have also examined the relations between entrepreneurial intention and behaviour, on the one hand, and more specific personality traits, on the other hand. The argument is that broad personality traits are

[19] See, for example, the numerous studies based on Eurobarometer data (Blanchflower et al., 2001; Grilo & Irigoyen, 2006; Grilo & Thurik, 2008; Stam et al., 2010) and on Global Entrepreneurship Monitor data (Autio & Acs, 2010; Bosma & Levie, 2010; Reynolds et al., 2005).

less proximal to entrepreneurship, whilst narrow traits like need for achievement, risk-taking, innovativeness, autonomy, locus of control and self-efficacy are more closely linked to entrepreneurial intention. Indeed, by and large, the empirical evidence does support this claim (see Rauch & Frese, 2007, for an overview).

So, from the extant literature, we can conclude that broad personality traits, which are aggregated across time and context, are generally found to show smaller and weaker relationships with entrepreneurial intention than more specific personality traits (such as those listed above). Therefore, in describing how individual differences impact on entrepreneurial intention and activity, Rauch and Frese (2007) presented a model arguing that broad personality traits have an indirect impact on entrepreneurial goals and behaviours through their direct effect on specific traits that are more closely related to entrepreneurship. Future research is necessary to investigate such a more integrated mediation model of both broad and specific trait-related determinants of entrepreneurial intention.

Next to the impact of "deep" personality traits on entrepreneurial intention, some general "surface" demographic characteristics such as age, gender, social background and education have been found to be related to the decision to become an entrepreneur. First, individuals are more likely to start their own business as their age increases. However, after a certain age, the likelihood of starting a business will decrease with increasing age (Levesque & Minniti, 2006). Second, men are generally more likely to start a business than women are (Blanchflower, 2004). Third, greater family wealth and, therefore, low or no liquidity constraints are positively associated with the likelihood of establishing a business (Kihlstrom & Laffont, 1979). Fourth, high levels of education generally do not increase the likelihood of setting up new businesses (Blanchflower)[20].

[20] However, see Block et al. (2012) with counterevidence: using an instrumental variables approach they find a positive effect of education on the choice to become an entrepreneur.

Of course, beyond demographic features and personality traits, other aspects can guide an individual's decision to start a new business. An aspect that received quite some attention is motivation. Hessels et al. (2008) distinguished between motives that can be classified as opportunity and motives classified as necessity – that is, 'pull' motives and 'push' motives. Pull motives refer to reasons such as striving for autonomy and independence, financial gains, challenge, and recognition and status (e.g., Carter et al., 2003; Gatewood et al., 1995; Hessels et al., 2008; Scheinberg & MacMillan, 1988; Shane et al., 1991). Push motives have to do with reasons that push individuals into entrepreneurship, a prominent example being (a threat of) unemployment (Hessels et al., 2008). We return to a motivational approach to (ambitious) entrepreneurship in Chapter 4.

2.2 ENTREPRENEURIAL BEHAVIOUR

As is indicated in the theory of planned behaviour, intentions can translate into behavioural actions. A number of researchers have investigated the relationships between different kinds of personality traits or other individual characteristics, on the one hand, and entrepreneurial behaviours, on the other hand. Below, we briefly hint at the different sets of factors that can impact on entrepreneurial behaviours.

General and specific personality characteristics

Besides investigating the relations between (broad and specific) personality traits or other characteristics and entrepreneurial intention, earlier studies have tried to relate these traits or characteristics to entrepreneurial behaviours. Basically,

a similar conclusion can be drawn as to entrepreneurial intention: namely, that relations between specific personality traits or characteristics, such as need for achievement, innovativeness and self-efficacy, and entrepreneurial behaviours are larger and stronger than relationships between broad personality traits or characteristics and entrepreneurial actions (Rauch & Frese, 2005; 2007).

Knowledge, skills and competencies

Evidently, in order to become a successful entrepreneur, individuals need the necessary knowledge, skills and competencies. For example, the ability to recognize unexploited opportunities in the market (alertness; see Koellinger et al., 2007) is extremely valuable for those engaging in entrepreneurial activity. In a recent study, Koellinger et al. (2007) found that the subjective belief that one has the necessary knowledge, skills and abilities to start a new business – so-called entrepreneurial confidence – is an important predictor of the decision to do so or not. Moreover, the results show that entrepreneurial self-confidence is negatively related to survival rates of nascent entrepreneurs, suggesting that such failing individuals may be overconfident with respect to their skills and abilities.

Many researchers have found support for the existence of overconfidence[21] among people in general (e.g., Hoffrage, 2004), and among entrepreneurs in particular (Busenitz & Barney, 1997; Cooper et al., 1988). This is so because individuals tend to think about the issues they face by considering all they know about the issue at hand (i.e., the inside view); but, at the same time, they neglect a large part of the information that is available about this issue in the outside world (e.g., statistics, forecasts, expert opinions, and the like; i.e., the outside view). Moreover, increased transparency about economic and political conditions tends to go together with

[21] A related literature, generating similar conclusions, focuses on overoptimism (e.g. Cassar, 2010, and in the context of the commercialization of university inventions: Lowe & Ziedonis, 2006), which is defined as "generalized expectancies for experiencing positive outcomes" (Hmieleski & Baron, 2009; Scheier et al., 2010).

individuals' perceptions that they are in control and that their actions will be in line with the realized outcomes. However, overconfidence can trigger individuals to become an entrepreneur in the first place. Hence, although overconfidence can lead to business failure, it is not necessarily bad from a macro perspective. Overconfidence is not only positively associated with the likelihood of establishing a business, but the experiences of overconfident and unsuccessful entrepreneurs can provide valuable information from which future entrepreneurs can learn (Koellinger et al., 2007).

Biases and heuristics

Research suggests that individuals use a "judgment and decision-making framework" to choose from a set of different alternative options (e.g., become an employee or an entrepreneur, or having ambitious goals or not) (Schade & Koellinger, 2007). As starting a business often requires making decisions based on little information, and as people are boundedly rational, individuals turn to simple decision rules or heuristics rather easily – or, actually, out of necessity. However, the downside of heuristics is that they are associated with biases[22].

Schade and Koellinger (2007) distinguished three ways in which the behaviour of entrepreneurs can be affected by heuristics and biases. First, the behaviour of entrepreneurs can be dependent on experiences or expectations in non-rational ways, which is referred to as reference-dependent behaviour. For example, investments made in the past stimulate individuals to continue making efforts and investing in a business even if the gains fail to cover the costs. This bias is known as the sunk cost fallacy in microeconomics, or escalating commitment in organizational behaviour. Second, behaviour is also affected by biases in probability

[22] Of course, biases and heuristics should not always be regarded as something negative. Heuristics can help to make decisions rather quickly, which may well be necessary in dynamic and fast-changing circumstances (Schade & Koellinger, 2007).

perceptions – that is, the probability of events is evaluated, but not in an objective and rational way. For example, more recent experiences will have a greater effect on individuals' reasoning, decisions and behaviours than experiences from a more distant past. In addition, imaginability can guide decisions, such that being very imaginative in thinking about positive (negative) outcomes will increase (decrease) positivity about a project. A final example is biases in self-perception, meaning that individuals not always judge their own ability and behaviour in an objective way. For instance, oftentimes, failures are mostly attributed to external factors, while successes are attributed to internal factors. This might be driving entrepreneurial overconfidence, as briefly discussed above.

2.3 ENTREPRENEURIAL INTENTION HETEROGENEITY

In trying to understand the drivers of entrepreneurial intention and behaviour, we should, of course, acknowledge that different types of entrepreneurship must be distinguished, with different types revealing different intentions. Specifically, some entrepreneurs start their own business without a growth intention, while others do so with a high-growth intention. Alternatively, while some entrepreneurs establish a business in an existing market or niche with known products or services, other entrepreneurs strive for innovation and seek to find an unexplored niche in the marketplace. Where do such differences in entrepreneurial intention come from? Here, we briefly present some arguments that circulate in the literature as to entrepreneurial intention heterogeneity, some of which relate to entrepreneurial motives in general (see Chapter 4 on this) or growth ambition in particular (as reviewed in Chapter 5).

Preferences for growth

Recent work tried to understand how career motives differ amongst entrepreneurs with different growth aspirations. In this respect, Cassar (2007) showed that entrepreneurs with high-growth preferences (in terms of sales or employment) also assign more importance to all career reasons mentioned in this study – namely, self-realization, financial success and innovation. Comparison of entrepreneurs with low-growth preferences and their counterparts with high-growth preferences led to the finding that independence is the most important career motivation for both groups, but financial success is also extremely important for entrepreneurs with high-growth preferences. These findings suggest that entrepreneurs with low-growth ambitions value independence the most, and perceive employment growth as negatively affecting their independence. This conclusion is consistent with the work of Davidsson (1989), who found that entrepreneurs who fear a loss of control in case of growth, will have low-growth preferences. Moreover, research shows that a concern for employees strongly impacts growth preferences such that, if entrepreneurs expect that growth enhances employee well-being, their growth ambitions will be high, and vice versa (Davidsson, 1989). Finally, Kolvereid (1992) revealed that entrepreneurs with high-growth ambitions are characterized by a high need for achievement.

Preferences for innovation

Another important distinction related to entrepreneurship can be made, which is the degree of innovativeness. In the literature, imitative entrepreneurs are defined as individuals starting a business that does not significantly differ from existing businesses in the marketplace, and innovative entrepreneurs as individuals esta-

blishing a business that does significantly differ from existing organizations in the market they enter. Innovative entrepreneurship generally goes together with high uncertainty and risk. Why do some entrepreneurs opt for more risky or uncertain business adventures than others?

Koellinger (2008) investigated precisely this, using the waves from the Global Entrepreneurship Monitor database for 2002, 2003 and 2004. Innovativeness is measured in a rather subjective way, by means of three items trying to identify whether the entrepreneur is involved in product innovation and / or process innovation, and whether s/he faces a low level of competition in the market. If one of these conditions is met, the entrepreneur is defined as innovative. If neither of these conditions is satisfied, the entrepreneur is considered to be purely imitative. It is found that both individual and environmental factors impact the degree of entrepreneurial innovativeness. More specifically, innovative entrepreneurship is more likely to occur in highly developed countries, and is stimulated by high education, high self-confidence, and being unemployed. Unemployed individuals actually come from a loss situation, and are therefore more willing to take risk in order to regain status. Moreover, a high level of self-confidence is necessary to handle high risk and uncertainty. Finally, high education provides the necessary background knowledge, as well as some training, to deal with complexity.

These findings suggest that policy-makers have an important role in stimulating entrepreneurship. For example, by providing the right type of information (e.g., about new technologies or new organizational forms) innovative entrepreneurship can be facilitated. However, such efforts made by policy-makers do not necessarily lead to higher levels of innovative entrepreneurship, as individual characteristics co-determine the likelihood of becoming an innovative entrepreneur. Hessels et al.

(2008) found, however that, contrary to their expectations, innovative entrepreneurship is not stimulated by motives of wealth or financial success. This suggests that innovative entrepreneurs might take the challenge not because they expect they can gain, but because they want to explore their idea.

Preferences for internationalization

The literature on entrepreneurial preferences for internationalization is close to non-existent. Hessels et al. (2008) found in their investigation, using the country-level data from the Global Entrepreneurship Monitor (2005-2006), that entrepreneurs characterized by motives of wealth and financial success are generally more export oriented. An export strategy might help to realize the financial gains they want to achieve[23].

2.4 CONCLUSION

A few remaining puzzles are worth emphasizing, which point to interesting avenues for future research. First, in many countries, entrepreneurship policies are mainly directed at the educational system. But to date, it remains unclear what the effect of education is on entrepreneurship (for an overview of this literature, see Unger et al., 2011). Second, it is shown in the literature that need for independence may well be an important driver of entrepreneurship (see also Chapter 4 on this). However, this very same need does not drive 'ambitious' entrepreneurship – quite to the contrary. Third, some drivers of entrepreneurship have ambiguous effects on entrepreneurship[24]. While some studies suggest that these characteristics are

[23] A related literature can be found in the international business domain, dealing with issues such as new firm internationalization, "born globals", and start-up export strategies. Reviewing this large and rapidly growing literature would require a separate report. We decided not to do so, but rather limit our overview to growth and innovation.

[24] This is true for need of achievement as well, as explained in Chapter 4.

necessary for 'ambitious' entrepreneurship, other sources mention that these characteristics would lead to 'moderate' entrepreneurship, at best, because of risk aversion, and avoidance of high complexity and failure. Fourth, the effects of entrepreneurial actions differ, depending on the level of analysis. For example, actions are generally based on limited information, biases, heuristics and overconfidence. Due to this, actions not always lead to successes. Therefore, entrepreneurial actions may have negative consequences for the individual entrepreneur. However, at the macro level, such failures might be positive, because information becomes available for other entrepreneurs, which might otherwise not have been available. This is an issue we return to in Chapter 8.

CHAPTER 3

INTRAPRENEURSHIP

In this study, our perspective of entrepreneurship is a behavioural one, implying that the entrepreneurial act is not limited to new venture creation, but primarily focuses on and includes the identification, assessment and exploitation of entrepreneurial opportunities (Shane & Venkataraman, 2000) – see Chapter 1 for our definitions of (ambitious) entrepreneurship). Such entrepreneurial behaviour can also be conducted by employees within existing organizations – a behaviour which Pinchot (1987) labelled as 'intrapreneurship'. In this chapter, we take stock of the literature on intrapreneurial behaviours by employees inside established organizations.

Although different definitions and constructs have been proposed, here, for the sake of convenience, we label the phenomenon as 'intrapreneurship'. Our review includes multiple literatures, which overlap to a large extent. First, there is the organizational behaviour literature, with a continuous feedstock from organizational psychologists and other business scholars, dealing with proactive and innovative behaviours of employees. Second, there is a smaller but significant strand of research in the entrepreneurship literature that focuses on employees' behaviours to identify and exploit opportunities. We here summarize the core concepts in these literatures, and present an overall framework to map the similarities and differences between these behaviours. Next, we provide an overview of the antecedents and consequences of intrapreneurship. The chapter ends with a summary that includes a discussion of the strength of associations that are typically found in empirical studies.

3.1 INTRAPRENEURSHIP DEFINED

When researchers apply the term 'intrapreneurship', it usually refers to individuals rather than organizations or boardroom-level decision-makers (e.g., Antoncic & Hisrich, 2003; Pinchot, 1987; Stevenson & Jarillo, 1990). It closely resembles our Definition 2 of ambitious entrepreneurship in Chapter 1, but explicitly takes the perspective of individuals operating in established organizations. In line with this, intrapreneurship is defined as the identification and exploitation of opportunities by individual workers to (also) advance their organization, which is generally characterized by employees' innovation, proactive and risk-taking behaviours (De Jong et al., 2011). As such, intrapreneurship is a higher-order construct, capturing many related behaviours identified and described in the corporate entrepreneurship and organizational behaviour literatures, as discussed in the above (and following) chapters. More specifically, in line with the corporate entrepreneurship literature (e.g., Covin & Slevin, 1989; Miller, 1983), intrapreneurship entails three dimensions: innovativeness, proactiveness and risk-taking. Each of these dimensions then consists of other constructs, which together make up the intrapreneurial phenomenon. Figure 3.1 summarizes how each dimension is usually defined, and how each construct corresponds with the phases of the entrepreneurial process.

Innovativeness

Individuals' innovativeness is a key element of intrapreneurship. When Pinchot (1985: ix) coined the term 'intrapreneur', he proposed that intrapreneurs are "those who take hands-on responsibility for creating innovation of any kind within an organization; they may be the creators or inventors but are always the dreamers

who figure out how to turn an idea into a profitable reality." In the organizational behaviour literature, the construct of innovative work behaviour captures various behaviours during the process of opportunity identification and exploitation. This literature defines innovation as the production, adoption and implementation of useful ideas, including products or processes from outside an organization (Kanter, 1988).

Figure 3.1: Components of intrapreneurship

Innovative work behaviour is then defined as individual's behaviour aiming to achieve the initiation and intentional introduction (within a work role, group or organization) of new and useful ideas, processes, products or procedures (Farr & Ford, 1990). Kanter (1988) postulated individual innovation as a process that begins with problem recognition and the generation of novel or adopted ideas. Next, the innovative individual champions the idea to managers, peers and/or significant

others, attempting to create support for it. Finally, these activities result in a prototype or model of the innovation that can be further assessed and adopted by the organization.

Subsequently, more recent measures of innovative work behaviour (e.g., De Jong & den Hartog, 2010; Scott & Bruce, 1994) have captured the different stages of the innovation process, including opportunity exploitation (being alert on opportunities to improve current products, services or processes, or trying to think about current work processes, product or services in alternative ways, consulting opportunity sources), idea generation (generating concepts for the purpose of improvement, combining and reorganizing information and existing concepts to solve problems and/or to improve performance), championing (finding support and building coalitions, such as persuading and influencing other employees and pushing and negotiating), and implementation or application (doing what is needed to exploit opportunities, developing new products or work processes, testing and modifying them).

Proactiveness

Proactiveness has been associated with pioneering behaviour (Covin & Slevin, 1989) and initiative taking to pursue new opportunities (Lumpkin & Dess, 1996), and refers to the extent in which one attempts to lead rather than follow in key business areas (Covin & Slevin, 1989). Core elements of proactiveness include that people act in anticipation, take control, and are self-starting. In the related organizational behaviour literature, proactive behaviour is defined as "self-initiated and future-oriented action that aims to change and improve the situation or oneself" (Parker et al., 2006: 636).

Proactive behaviour is an overarching behavioural construct that captures many other constructs in the intrapreneurial domain. Parker and Collins (2010) empirically classified three kinds of proactive behaviour, each of which captures multiple constructs depending on individuals' aspirations. First, proactive work behaviour aims to improve the internal organizational environment, such as by improving work methods or influencing work colleagues (Parker & Collins, 2010). It includes behaviours like taking charge (voluntary and constructive efforts to effect organizationally-functional change with respect to how work is executed), voice (making innovative suggestions for change and recommending modifications to standard procedures even when others disagree), problem prevention (acting to prevent the re-occurrence of challenges and barriers to work) and also individual innovation – here considered a separate dimension of intrapreneurship. A related perspective is found in the work of Frese and Fay (2001) on personal initiative, defined as individuals' self-starting, proactive and persistent behaviours to overcome barriers in goal achievement in the work place.

Second, proactive strategic behaviour aims for a better fit between the organization and its environment. It includes strategic scanning (identifying organizational threats and opportunities) and issue selling (influencing strategy formation by making others' aware of particular events or trends) to take control of, and causing change in, the broader organization's strategy. Third, proactive person-environment fit behaviour focuses on improving the alignment between a person and her or his organizational environment. It includes seeking feedback to do a better job, as well as individual career initiatives. This third type is no part of intrapreneurship, as it primarily emphasizes developing the self rather than the organization.

Risk-taking

Intrapreneurial activities such as innovation, venturing and strategic renewal entail considerable risk, because time, effort and resources must be invested before the distribution of their returns is known. Incumbent definitions indicate that intrapreneurs engage in situations marked by a risk of potential losses. Thus, Vesper (1984) stressed that intrapreneurs would even act without their higher management's permission, Stevenson and Jarillo (1990) defined intrapreneurship as within-organization opportunity pursuit regardless of currently controlled resources, and Antoncic and Hisrich (2003) emphasized that intrapreneurs deviate from the status quo.

A nuance is that it has often been argued that entrepreneurs prefer moderate rather than high risks[25], and try to reduce and manage these as much as possible. Pinchot (1987: 16) himself, for example, stressed that once a challenging goal is chosen, intrapreneurs do everything they can to reduce the risk. Nevertheless, intrapreneurs are expected to take more risks than their non-entrepreneurial colleagues. As they pursue new opportunities, and consequently operate in uncertain environments, some risk-taking is part of their behaviour by default.

3.2 ANTECEDENTS

The antecedents of intrapreneurial behaviour (and its dimensions) have been well researched. To some extent, they are nearly identical to the antecedents of independent entrepreneurship and/or new venture creation. The central fact that differentiates intrapreneurs from entrepreneurs is the context within which their behaviour occurs. Entrepreneurs discover and exploit opportunities for themsel-

[25] This resembles findings in need for achievement research, as reviewed in Chapter 4. Future research might explore this resemblance further.

ves, while intrapreneurs also do it for their organization. In other words, their behaviour is also affected by their organization and its people. On the basis of prior work to date, antecedents of intrapreneurship can be classified according to the following scheme: dispositional traits, demography, cognitive abilities, job design, work context and broader environmental variables. We will briefly review the main insights that emerge from the extant literature for each of these classes of variables in turn.

Dispositional traits

Some antecedents to intrapreneurship involve personal traits that are to some extent innate. These so-called dispositional traits include (1) proactive personality, (2) need for achievement, (3) locus of control, and (4) self-efficacy. More dispositional traits have been studied (for example, stress tolerance and extraversion), but empirical studies then find no consistent correlations with intrapreneurial behaviours.

First, proactive personality is a dispositional trait to take action in order to influence one's environment and bring about change (Bateman & Crant, 1993). The prototypical proactive personality was introduced as someone who is relatively unconstrained by situational forces and who affects environmental change. People are not always passive recipients of environmental constraints on their behaviour; rather, they can intentionally and directly change their current circumstances (Bateman & Crant, 1993). Proactive personality was found to relate positively with individual innovation, taking charge, voice, problem prevention and issue-selling credibility (Parker & Collins, 2010), as well as with overall intrapreneurial behaviour (De Jong et al., 2011). In contrast, people with no proactive personality are expec-

ted to exhibit the opposite patterns: they fail to identify, let alone seize, opportunities to change things. Less proactive individuals are passive and reactive, preferring to adapt to circumstances rather than change them.

Second, need for achievement is a trait that makes people undertake activities and tasks that involve personal responsibility for outcomes, and that require individual effort and skill (McClelland, 1961)[26]. Implementation of innovative ideas requires solving novel and ill-specified problems. The willingness and ability to solve such problems demands an orientation toward meeting challenges – a characteristic of those people who are high in need for achievement. The implementation of opportunity-seizing behaviour also involves goal setting, planning and information gathering. Achievement-oriented people have a strong tendency to plan, to establish future goals, to gather information, and to learn (Miner, 2000). Finally, need for achievement generates a drive to exert the effort required to bring ideas to fruition. As a result, it increases the likelihood that a person will sustain goal-directed activity over a long period of time, persevering through the failures, setbacks and obstacles that are the inevitable result of decision-making under uncertainty with incomplete information.

Third, locus of control is the extent to which a person believes to be able to influence her or his environment – i.e., the extent to which individuals believe that their actions affect outcomes (Rotter, 1966). According to various scholars, individuals characterized by an internal locus of control (i.e., believing that their actions directly influence the outcomes of an event) are more likely to engage in intrapreneurial behaviours. They have a stronger sense that they can control their environment, and they will be more likely than people with an external locus of control to proceed with innovative ideas.

[26] See Chapter 4 for more detail. The intrapreneurship studies of need of achievement suffer from the same weaknesses as the one identified in that chapter, implying clear opportunities for future research.

Fourth, self-efficacy relates to individuals' perception that change can be successfully implemented in a situation – i.e., one's efficacy beliefs concerning the implementation of change. The construct has been associated with self-employment and new venture creation (Shane, 2003), but also with innovative decision-making in organizations (De Jong, 2011; Farr & Ford, 1990). Self-efficacy has a substantial impact on human behaviour, especially behaviour related to change – correlations with entrepreneurial outcome variables are usually in the 0.3 to 0.4 range. On the one hand, intrapreneurial individuals make subjective assessments about uncertain opportunities that differ from the subjective probabilities made by others. Consequently, they must have confidence in their own judgment and must not become too uncomfortable at the prospect of being wrong or at odds with a sceptical and disbelieving majority. Strong perceptions of self-efficacy result in the individual approaching tasks with enthusiasm, expending great amounts of energy toward task accomplishment and persistence in the face of obstacles (Bandura, 1982). Those with serious doubts about their capability to succeed, on the other hand, are more likely to avoid the activity, exert little effort, and give up quickly[27].

Demography

Demographic antecedents of intrapreneurial behaviours have, rather surprisingly, been studied less often. Researchers tend to include demographic variables in their models, but only to control for their effects and not to understand them (Bindl & Parker, 2010). Besides, in the context of intrapreneurship, their results are mixed, allowing no decisive answers. Gender, for example, is a common determinant of self-employment (males are more likely to start a business), but in within-organization studies the gender effect usually disappears when other variables (such as

[27] See Chapter 2 on this, too. Note that self-efficacy may be associated with overconfidence, as observed in that chapter.

tenure and hierarchical level) are controlled for. Similarly, ethnic origin provides mixed results as well (Bindl & Parker, 2010).

Recent work suggests that age is associated with intrapreneurship. In the independent entrepreneurship literature, the relationship with self-employment, business creation and entrepreneurial outcomes (such as survival and growth) is known to reveal an inverted U-shape (e.g., Bosma & Levie, 2010). Age is supposed to incorporate the positive effects of experience and the negative effects of uncertainty acceptance and desire to start a business (Bosma & Levie, 2010). In the intrapreneurship literature, recently similar results have been found (De Jong et al., 2011). Motivation for intrapreneurship decreases with age, as aging people are less open to new experiences and change (e.g., Carstensen et al., 1999). Simultaneously, perceived capability to exploit opportunities increases with age. Being more experienced, employees feel more capable to persuade others and to acquire missing resources, knowledge and skills. In sum, evidence on demographic effects is still limited, except that middle-aged workers are slightly more likely to be intrapreneurs (cf. Bosma et al. 2010a).

Cognitive abilities

Cognitive ability implies that a person possesses relevant skills and knowledge in her or his work domain; accordingly, s/he is better capable of identifying and exploiting opportunities. The more a person knows to have the knowledge and capacity to deal with a situation, the more s/he perceives the outcome as controllable. In this context, two indicators have been positively associated with intrapreneurial behaviors: (1) educational attainment, and (2) domain-related experience.

Educational attainment has previously been connected to the decision to become

self-employed (e.g., Delmar & Davidsson, 2000) and to the success of independent entrepreneurs, as it increases their capability to identify and exploit opportunities due to better prior knowledge, and better capacities to acquire external resources and to accumulate new knowledge and skills (Unger et al., 2011). Drawing on similar reasoning, organizational behaviour studies found similar relationships between education and proactive behaviours such as voice (LePine & Van Dyne, 1998) and continuous improvement (Fuller et al., 2006). Moreover, human capital theory suggests that people desire to be compensated for their human capital investments. Human capital refers to skills and knowledge that individuals acquire through investments in schooling, on-the-job training and other types of experience (Becker, 1964). In the context of intrapreneurship, well-educated people are more likely to be proactive and take risks to advance their careers (De Jong et al., 2011). As intrapreneurial behaviours are generally associated with better job performance and appraisals, opportunity pursuits are worth considering to make the most out of earlier human capital investments.

Domain-relevant experience is another variable associated with intrapreneurship. While education is one useful route to develop skills and knowledge, experience is another. Through relevant work experience, people develop skills and knowledge on especially tacit issues. These facilitate the formulation of implementation strategies, the acquisition of resources, and the process of organizing. Indeed, independent entrepreneurship literature suggests that domain-related experience is a proxy for the access of individuals to knowledge and abilities needed to exploit opportunities (Shane, 2003). Moreover, innovation studies of individuals in organizations usually applied tenure as a control variable and find it to be positively related with the dependent variable. Just like education level, this serves as con-

trol for differential cognitive abilities of individuals (e.g., Janssen, 2000; Scott & Bruce, 1994).

Job design

Job design has proven to be a powerful antecedent of multiple intrapreneurial behaviours. In this category, four relevant antecedents are: (1) job type, (2) job autonomy, (3) job variety, and (4) external work contacts.

First, workers in some jobs are more likely to become intrapreneurs – usual suspects are middle managers and sales workers. Both types of workers have been shown to be likely intrapreneurs, with empirical correlations usually exceeding 0.30. Middle managers, while being at upper hierarchical levels, face better opportunities to identify and implement entrepreneurial ideas due to their different organizational roles (Hornsby et al., 2002). Hierarchical position has been correlated with innovative behaviours; i.e., Kanter (1988) concluded that middle managers are 'masters of change', and are more likely to generate, champion and implement innovative ideas. Middle managers are also likely to engage in proactive behaviours. For example, Fuller and colleagues (2006) found that individuals' hierarchical position influenced their felt responsibility for constructive change, which in turn correlated with voice and continuous improvement behaviours. Finally, middle managers have been central in analyses of risk-taking behaviours (e.g., Ling et al., 2008). They then tend to be compared with independent entrepreneurs who are believed to be their counterparts outside the firm (Stewart & Roth, 2001). Next, sales workers are more likely to be intrapreneurs. They are generally more externally focused and have diverse networks. This keeps them in close touch with external need sources, which increases their chances of identifying opportunities.

Sales people are also recognized for their strong need to conquer (Mayer & Greenberg, 2006). They will often fail to make a deal, and need to be persistent and accept losses (of their time and resources) in order to succeed. As a consequence, they are more proactive and are willing to take risks (De Jong et al., 2011).

Second, job autonomy may be defined as the ability to determine independently how to do a job or certain task. Such autonomy has been repeatedly demonstrated to influence intrapreneurship. Autonomous employees are better motivated and are better able to implement innovative ideas, because they feel to be in control and able to deal with bottlenecks during the implementation phase. As such, job autonomy has been empirically correlated with innovativeness (Axtell et al., 2000; De Jong & den Hartog, 2005; Spreitzer, 1995), but also with personal initiative, idea implementation and problem solving (Bindl & Parker, 2010). Again, it is usually a strong predicator of intrapreneurship – i.e., regression coefficient tend to be larger than 0.30.

Third, job variety generally correlates with intrapreneurial behaviours. In her early work on individual innovation, Kanter (1988) identified that when jobs provide very little challenge and meaning, employees can feel crippled. Rather, when organizations provide multiple sources of loosely committed resources at decentralized or local levels, structure open communications systems, and create extensive network structures, individual innovation is expected to be facilitated much better. In line with this reasoning, more recent studies empirically linked job variety and intrapreneurial behaviours – for example, innovative work behaviour (De Jong & den Hartog, 2005), personal initiative (Frese et al., 1996; Salanova & Schaufeli, 2008), and problem solving and risk-taking (Salanova & Schaufeli, 2008).

Fourth, external work contacts relate to the frequency and scope of one's contacts

with individuals or groups outside the organization, such as customers, suppliers, knowledge institutes and competitors. Such contacts provide individuals with better access to customers' needs and wants, the competitive situation, and the nature of the market. Kanter (1988) already noted that external contacts are an important innovation activator. In her words, "[c]ontact with those who see the world differently is a logical prerequisite to seeing it differently ourselves" (175). In this context, Perry-Smith and Shalley (2003) developed propositions on the association between social relationships and the related construct of creativity. They suggest that individuals with frequent external work contacts will dispose of a more diverse network with many weak ties. The access to non-redundant information and diverse social circles provided by these weak ties facilitate a variety of processes helpful to recognize opportunities. More recently, empirical evidence on the significance of external work contacts was provided by De Jong and den Hartog (2005).

Work context

In the corporate entrepreneurship literature, much attention has been paid to the identification of organization-level antecedents of intrapreneurship. Hornsby and colleagues (1993; 2002; 2009) identified a number of variables that matter for this purpose. In general, influential work context variables include (1) rewards, (2) resources/time, (3) leadership, and (4) work group climate.

First, rewards and reinforcements enhance the motivation of individuals to engage in deviant behaviours. Past work suggests that an effective reward system that spurs entrepreneurial activity must consider goals, feedback, emphasis on individual responsibility, and results-based incentives. The use of appropriate rewards

can also enhance workers' willingness to assume the risks associated with entrepreneurial activity (Hornsby et al., 1993).

Second, resources (including time) influence workers' willingness and motivation to become intrapreneurs. In order to exploit opportunities, they tend to invest resources or compensate their time. The availability of slack resources usually encourages experimentation and risk-taking behaviours. Organizations are advised to moderate the workload of their people, avoid putting time constraints on all aspects of a person's job, and allow people to work with others on long-term problem-solving (Hornsby et al., 1993; 2002). Organizational behaviour research has also demonstrated that resources are critical to trigger individuals in organizations to start with and remain committed to innovative activities. As Janssen et al. (2004) point out, the implementation of an innovation can be costly because getting acquainted with new ways of working will take extra work time of those involved.

Third, leadership clearly matters for intrapreneurship. Relevant leadership styles are participative leadership, transformational leadership, and direct support for opportunity pursuit. Participative leadership involves the use of various decision-making procedures that determine the extent to which people can influence their leader's decisions, and have autonomy to design and guide their own tasks. It has been shown to be directly related with the job design issues that we discussed above – and more importantly, to enhance workers' contributions to innovation (Axtell et al., 2000; De Jong, 2007). Transformational leadership attempts to explain how certain leaders are able to achieve extraordinary levels of employees' performance. Transformational leadership predicts followers' emotional attachment to the organization, and emotional and motivational arousal of followers as

a consequence of leader behaviours such as charisma, inspiration, individual consideration and intellectual stimulation (Den Hartog, 1997). This form of leadership has been shown to encourage individual innovation and risk-taking by employees (e.g., Krause, 2004). Finally, direct managerial support is the extent to which the management itself encourages employees to believe that opportunity identification and exploitation is part of the role set for all members of the organization. Some of the specific conditions reflecting management support would be (a) quick adoption of employee ideas, (b) recognition of people who bring ideas forward, (c) support for small experimental projects, and (d) seed money to get projects off the ground (Hornsby et al., 1993; 2002; De Jong, 2007). Obviously, leadership matters for basically all job design and work context variables discussed in this chapter.

Fourth, work group climate relates to the feelings, attitudes and behavioural tendencies that characterize working as a team of individuals. Groups can exert powerful pressures on individuals to adjust their behaviour. The more strongly an individual is attracted to a group and wishes to remain part of it, the more likely s/he is to conform to the majority view within the group. A deviant person will be subject to strong persuasive pressures; and, eventually, if s/he does not conform, s/he will be excluded from the group (Tesluk et al., 1997). Thus, if norms and values in a work group prescribe 'intrapreneurship', individuals within that group will be triggered to be intrapreneurial – and indeed, the importance of work group climate has been shown for innovativeness (Axtell et al., 2000) and issue selling (Dutton et al., 1997). Rather, a favourable climate encompasses a shared vision towards opportunity pursuit, participative safety (to speak up and raise concerns or propose ideas without the fear of negative consequences), striving for excellence,

and enacted support for innovation beyond applauding words. In sum, the emergence of intrapreneurship is also a social phenomenon, depending on people's interactions with their colleagues and leaders, and how they perceive their opinions and responses.

Broader environment

Any individual within an organization eventually also needs to deal with a wider environment. As we discussed above, individuals' contacts with the extra-organizational environment can partly determine whether or not intrapreneurial opportunities are identified. Broader environmental conditions are likely to influence people's engagement in intrapreneurship, but only few studies have been done so far – basically because organization researchers prefer and are used to studying intra-organizational factors at the levels of individual workers and work context. In this vein, De Jong and Den Hartog (2005) found that if knowledge workers were employed in industry environments marked by competition drawing on differentiation, they were more likely to engage in innovation behaviours – also after controlling for work context and individual-level variables.

Research in this area has been too scarce to allow for drawing any clear conclusions. In contrast, the independent entrepreneurship literature has identified a great deal of environmental antecedents of self-employment and venture creation, including knowledge conditions, market demand, appropriation conditions and industry types (Shane, 2003; see also Chapters 7, 8 and 9). This shift in research attention makes sense. As independent entrepreneurs interact directly with the market, we can expect broader environmental factors (such as competition and regulation) to be more dominant antecedents of their behaviour; for intrapreneurs,

their behaviour is more likely to be influenced by their organization and its people. Nevertheless, rather than an educated guess, empirical research is needed to take a final stance.

3.3 CONSEQUENCES

The outcomes of employees' intrapreneurial efforts are still under-researched. Yet, there are no reasons to assume that the consequences of such behaviour strongly differ from ambitious entrepreneurship by means of new venture creation, or from entrepreneurial behaviour of self-employed people. While the independent entrepreneurship literature demonstrates that ambitious entrepreneurs are more likely to see their ventures survive, be profitable and grow (Shane, 2003; see also Chapter 7), the intrapreneurship literature suggests that intrapreneurs do better than other employees in terms of individual job performance and innovative output (cf. Bosma et al., 2010a), with their organizations benefitting from this by performing better, too.

Individual job performance

Empirical studies on components of intrapreneurship suggest that such individuals are perceived to perform better in their incumbent job – despite their engagement in behaviours to deviate from the status quo. Thus, individual innovation has been correlated with in-role job performance (Janssen & Van Yperen, 2004), and actual promotions at work after two years and salary increases (Seibert et al., 2001). Voice, taking charge and issue selling were associated with overall performance rated as by supervisors (Grant et al., 2009). For risk-taking, Rauch and Frese's (2007)

meta-analysis of individuals' entrepreneurial traits revealed a positive correlation with the success of entrepreneurial behaviour. Findings so far suggest that, in effect, intrapreneurship is appreciated by supervisors, and is associated with better performance.

Innovative output

Another outcome is that intrapreneurs actually contribute to innovation as an outcome. Such employees appear to contribute to the number of patents obtained, to suggestion systems, and to new product introductions or completed innovation projects (e.g., Hornsby et al., 2002; Scott & Bruce, 1994). Scott and Bruce (1994), for instance, reported significant correlations between innovative work behaviour and independently rated counts of invention disclosures. Another example is that intrapreneurial individuals report more favourable self-ratings of their innovative outputs, including those relating to the implementations of new products and services, work practices, knowledge and markets (Axtell et al., 2000).

Firm performance

Frese and Fay (2001) suggested that personal initiative also predicts performance at the organizational level. They argued that personal initiative means dealing actively with organizational and individual problems, and applying active goals, plans and feedback. This furthers individual self-development and contributes to organizational success. Empirical evidence for this supposition was found in studies of small business owners' personal initiative and firm success in Uganda and in East Germany (Frese & Fay, 2001). Moreover, Frese et al. (2000) conducted structured interviews with business owners to find that reactive behaviour, which is the op-

posite dimension of proactiveness, related negatively with the success of the firm measured on the basis of objective profit data (r = –0.26) and their own perceptions of how well their business had developed (r = –0.41, with p < .01). Finally, in the corporate entrepreneurship literature, it is consistently found that firms' entrepreneurial orientation is related with their organizational performance (with an average correlation of r = 0.24), and that this relationship is robust to different operationalizations of both constructs (Rauch et al., 2009). In sum, although the impact of employees' intrapreneurial behaviours on firm performance should be studied in more detail, these findings suggest a positive relationship.

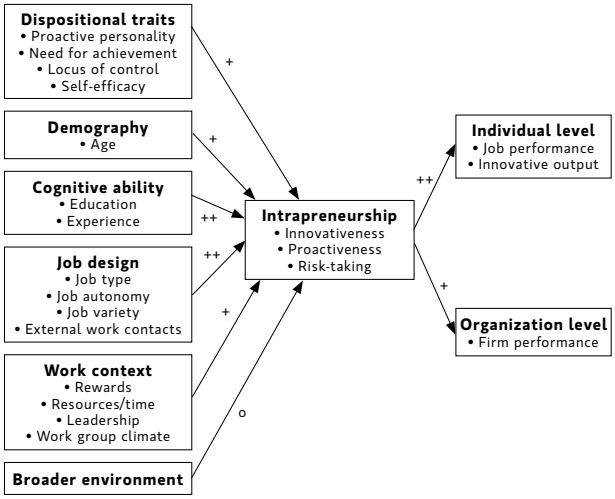
3.4 CONCLUSION

As a separate research topic, 'ambition' or 'ambitious entrepreneurship' is not explicitly present in the corporate entrepreneurship literature. There is, however, the related research theme of intrapreneurship, which can be defined as the identification and exploitation of opportunities by individual workers to (also) advance their organization, which is generally characterized by employees' innovation, proactive and risk-taking behaviours. Intrapreneurship is a higher-order construct capturing various components/dimensions, including constructs like opportunity exploration, idea generation, taking charge, championing, voice, strategic scanning, and more.

The antecedents of intrapreneurship (and its components) have been well researched. Empirical contributions so far show that intrapreneurship is associated with dispositional traits (proactive personality, self-efficacy, et cetera), cognitive abilities (particularly education and experience), demographics (especially age), and

job design and work context (including available resources). Research on the demography of intrapreneurs has been scarce, with mixed results, while studies on the role of broader environmental factors is still in its infancy. Moreover, past work suggests that intrapreneurship pays off at both the individual and organizational level. Figure 3.2 summarizes the antecedents of consequences of intrapreneurship.

Figure 3.2: Antecedents and consequences of intrapreneurship



Note: Strength of association is ++ moderate to strong, + weak, o not yet demonstrated.

The figure also indicates the strength of association that is typically found in empirical studies. In sum, the strongest antecedents are typically found for cognitive ability and job design factors (effect parameters of 0.20 to 0.30 are common). Cognitive ability indicators are usually stronger related with intrapreneurship indicators than in the corresponding independent entrepreneurship literature, in

which the strength of association is typically 0.10 to at most 0.20 (Unger et al., 2011). For dispositional traits, demographics and work context, the regression coefficients are usually weaker (at most 0.20, if significant at all). As for outcome variables, these associations tend to be stronger – i.e., around 0.35 at the individual level (e.g., De Jong & Den Hartog, 2010), and 0.15-0.25 at the organizational level (Rauch et al., 2009). The total explained variance in individual intrapreneurship studies is usually around 0.30, indicating that our understanding of what makes people engage in intrapreneurship can still be improved.

CHAPTER 4

MOTIVES FOR AMBITIOUS ENTREPRENEURSHIP

In this chapter, we will present a critical review of this literature on a key aspect of this report's topic – namely, the factors that motivate individuals to become what we have termed "ambitious" entrepreneurs in Chapter 1. The focus on ambitious entrepreneurship is triggered by the observation that many entrepreneurs in many countries remain marginal, in the sense that they do not produce much extra value beyond the provision of self-sufficiency (i.e., small business owners). This is reflected in the low percentage of entrepreneurs who succeed in turning their enterprise into a high-growth firm, generating large sales, creating substantial employment, and introducing real innovations to the marketplace. Thus, a key question is: what sets ambitious entrepreneurs apart from their "marginal" counterparts?

Our aim is to provide a clearer insight into the antecedents of "ambitious entrepreneurship" at multiple levels of analysis – the individual level, the national level and the international level[28] – by reviewing and reflecting upon the current state of the art in the literature. We seek to answer two questions: "why are some entrepreneurs more ambitious than others?"; and "does the incidence of ambitious entrepreneurship differ across countries?" So, we have to identify what sets high-ambition entrepreneurs apart from their low-ambition counterparts, and how this can be captured empirically. In this respect, various theories of motivation are discussed in the context of entrepreneurship, as "ambition" implies an explicit reference to motivation. That is, ambitious entrepreneurs are different from their non-ambitious counterparts precisely because they are differently motivated. Additionally, a link between national (cultural) values and (ambitious) entrepreneurship must be established. After all, the degree of entrepreneurial activity, of the ambitious and non-ambitious type, varies greatly across societies. Where available, information about specific countries or country clusters will be presented and

[28] See, e.g., other pleas for multi-level analysis of entrepreneurship by Low and MacMillan (1988) and Davidsson and Wiklund (2001).

discussed. Finally, we will conclude this literature review by reflecting upon what we believe are promising avenues for future research, given our evaluation of the current state of the art.

Note that, along the way, we formulate propositions – some based on prior work, and some rather speculative. This serves two purposes. First, such propositions provide summaries of our arguments. Second, and more importantly, they point to issues that we believe need further attention in future work. The reason we decided to opt for this proposition format in this chapter alone, and not in any of the other chapters, is that we would like to emphasize, by doing so, that this corner of entrepreneurship research is ripe for a renaissance, because somewhere down the line this type of work took a wrong turn, by adopting incorrect methodologies, as will become clear after consulting the modern psychology of motivation. As a result, this seeming dead-end in the entrepreneurship literature should actually be "renovated", as motivation is, we believe, essential for the study of ambitious entrepreneurship. After all, the adjective "ambitious" explicitly refers to motivation as the key aspect setting ambitious entrepreneurship apart from its non-ambitious counterpart. This is why we decided to summarize our arguments by formulating a prediction as to how a specific type of entrepreneurial motivation, or the interplay between different types of motivation, may be related to (a specific type of) value generation. Sometimes, we can do so with reference to cumulative evidence from the literature; oftentimes, we can do so only in a speculative and tentative way, due to lack of prior work.

4.1 DISTINGUISHING ENTREPRENEURS FROM NON-ENTREPRENEURS

A first step in developing a motivation perspective on ambitious entrepreneurship is to sharply distinguish entrepreneurs from non-entrepreneurs. As a steppingstone, we look at the attempt to clarify the differences between entrepreneurs and small business owners (Carland et al., 1984). In this context, researchers have explored the motivations, behaviours and goals of entrepreneurs and non-entrepreneurs. Despite this extensive scholarly work, as yet no consistent "psychological profile" of the archetypal entrepreneur has emerged (see, for example, Carland et al. (1984) for an extensive and comprehensive overview of psychological characteristics that have been studied in entrepreneurship research).

What is clear from prior work, though, is that atop the list of psychological characteristics most interesting to those studying entrepreneurs is motivation. This chapter's review is no exception, as explained above, with its goal to untangle the mystery of ambitious entrepreneurship. In the psychology literature, motivation refers to "internal states that impel people to goal-directed action" (Brody & Ehrlichman, 1998: 195). Motives and goals reflect what a person is trying to achieve with a particular behaviour; they explain why the person is doing what s/he is doing. Each need or motive is defined by the incentives that satisfy it. Where complex social motives are concerned, the incentives that satisfy them are not always obvious. Consequently, a vast field of research has developed in the area of motivation theory.

A specific sub-field of motivation research that has particularly attracted the interest of entrepreneurship scholars is the field of achievement motivation. Achie-

vement motivation deals with motivation as it relates to performance on tasks in which standards of excellence are relevant (Wigfield et al., 2009). Research into achievement motivation seeks to understand the motivational predictors of choice, persistence and effort, and to develop theories of motivation on this basis (Eccles et al., 1998; Wigfield et al., 2006; 2009). The seminal works by Murray (1938), who first formalized the achievement motive (Johnson, 1990), and McClelland (1961), who identified four central social motives[29], most notably the "need for achievement", have had a profound influence on subsequent achievement motivation research, particularly as it has been applied in the field of entrepreneurship research. Therefore, before turning to other motives, we first critically review the need for achievement research as it relates to entrepreneurship.

4.2 NEED FOR ACHIEVEMENT

The roots of need for achievement research

According to McClelland, the primary incentive underlying the need for achievement is simply the desire to "do something better" (Brody & Ehrlichman, 1998: 191). In other words, people who have a strong achievement motive disposition get a positive feeling from doing something better. An important caveat is that 'doing something better' only satisfies the achievement motive when it is *done for its own sake*. For example, doing better to please another person (e.g., a spouse or a teacher) does not reflect an achievement motivation; rather, it most likely satisfies the "need for affiliation" motive disposition, another social motive identified by McClelland. We return to the need for affiliation below. For now, we focus on the need for achievement, as this motive disposition is clearly linked to the notion

[29] The other three motives are the need for power, the need for affiliation and the need for intimacy. We return to these other motives below.

of ambition, and because this need has been studied extensively in the entrepreneurship domain.

Indeed, perhaps not surprisingly, research exploring the motives of individuals who pursue entrepreneurship, has emphasized achievement motivation, relying heavily on McClelland's "need for achievement" construct in particular. McClelland (1961) himself argued that successful businessmen in general, and successful entrepreneurs in particular, have an above-average need for achievement[30]. In reviewing this extensive achievement-oriented research tradition, we have identified several unresolved issues. Here, we briefly discuss seven of these issues, which we believe are the most critical ones in need of addressing in future research.

Issue 1: Weak empirical support

The first observation is fundamental: the empirical support for the achievement motivation-entrepreneurship relationship is weak, at best. In a comprehensive review of the literature linking achievement motivation to entrepreneurship, Johnson (1990) concluded that, although "it would seem reasonable to draw the tentative conclusion that a positive relationship exists between [achievement motivation] and entrepreneurship … it is not possible to state that the case has been proven" (47). More than 20 years have passes since then, but this observation is still valid. The question is: why is this so? Among the chief causes of inconsistent research findings and a general lack of conclusive support for the supposed link between achievement motivation and entrepreneurship cited by Johnson and others are, probably, four methodological issues. These issues are discussed, in turn, below.

[30] Interestingly, and in contrast to entrepreneurs, he argued that successful managers have a stronger "power" motivation (cited in Amit et al., 2003; see also Brody & Ehrlichman, 1998). "Need for power" is defined by McClelland as "having an impact on others" by, for example, controlling them, impressing them or otherwise influencing them (Brody & Ehrlichman, 1998: 209). Below, we return to the need for power issue.

Issue 2: Sample selection variability

The widely differing definition of 'entrepreneur' is reflected in widely differing types of individuals included in study samples of 'entrepreneurs'. In the articles reviewed by Johnson (1990), samples ranged from university students and young men (only) to real estate brokers and (ethnic) minority business owners. This variation makes it difficult to draw clear conclusions from the cumulative evidence. To enhance cross-study comparability, we need to agree on the key definition of entrepreneurship, and select appropriate samples accordingly. From the perspective of the study of ambitious entrepreneurship, this implies the need for powerful and tailored research into samples of ambitious and non-ambitious entrepreneurs, in line with Definitions 1 and 2 above, preferably in the context of a panel design. Only then, entrepreneurial processes can be studied in a systematic way, comparing ambitious entrepreneurs with a 'control group' of non-ambitious entrepreneurs, evaluating how antecedents are related to consequences (particularly entrepreneurial intensity, as defined above).

Issue 3: Operationalizing variables

Achievement motivation has been operationalized inconsistently across studies, with researchers interpreting achievement motivation and the need for achievement construct differently. McClelland et al. (1989) uncovered a fundamental problem with the methods that had been utilized in the measurement of motives in general, to date; this was the realization that a given motive (e.g., need for achievement) can be either implicit or self-attributed (or explicit). This discrepancy was revealed as researchers sought to understand the generally low correlations between motives, as measured by techniques such as the Thematic Apperception

Test (TAT; Morgan & Murray, 1935) or other variations of the Picture-Story Exercise (PSE), and the same motive when measured via self-reports (Hofer et al., 2010).
An individual's implicit motives develop in very early childhood, during pre-language stages of development. The extent to which people are consciously aware of their own implicit motives is unclear. However, it is thought that most people are not consciously aware of them, on the one hand, and that self-attribution biases may be confused with implicit motives, on the other hand (Brody & Ehrlichman, 1998; Hofer et al., 2010; McClelland et al., 1989). Therefore, *implicit* motives can only be measured indirectly, using appropriate instruments such as the TAT or the PSE. Implicit motives can be described as "affective preferences for certain situations (e.g., those that allow the individual to act competitively)" (Hofer et al., 2010) and "that guide long-term behavioural trends and outcomes" (McClelland, 1987, cited in Hofer et al., 2010: 748).
Explicit or "self-attributed" motives, in contrast, develop later in childhood (after language acquisition), through explicit teaching by a socializing agent (parents, peers, teachers, et cetera). Self-attributed motives encompass the goals and values that reflect an individual's self-concept (i.e., how s/he would like to be) and are often drawn upon when the individual decides on which behaviour to show in a given situation (Hofer et al., 2010). For example, a person who has a low level of implicit achievement motivation but a high level of self-attributed achievement motivation would work hard when encountering a situation that has been explicitly defined as an achievement situation. In contrast, a person who is high in implicit achievement motivation but low in self-attributed achievement motivation will perform at a high level regardless of how the situation is defined; what is decisive in this case is that the situation provides the relevant incentives that

evoke the implicit achievement motivation (Brody & Ehrlichman, 1998: 203-204). Therefore, individuals are consciously aware of their self-attributed motives and, consequently, such motives can be measured with self-reporting instruments such as questionnaires (Hofer et al., 2010; McClelland et al., 1989).

In terms of operationalizing McClelland's "need for achievement" construct in entrepreneurship research, it is therefore imperative that the researcher clearly specifies whether s/he is testing need for achievement as an implicit motive ("*n* Ach") or as a self-attributed motive ("*san* Ach") and then, on that basis, uses the proper test instrument to evaluate the need for achievement, as discussed above. According to Johnson (1990: 43), "[i]n many instances, researchers cite McClelland to justify the study of achievement motivation in entrepreneurs, then use a measure other than the TAT without any explicit attempt at cross validation with the TAT. It simply cannot be taken for granted that the achievement scale of the EPPS, for example, is measuring the same construct as the TAT. In fact, Fineman (1977) found a statistically significant correlation between the TAT and the achievement scale of the EPPS in only one of eleven studies. In three cases the correlation was negative."

To shed further light on the low correlation between the results of projective measures of implicit motives and self-report measures of explicit motives, Schultheiss et al. (2009) used a Picture Story Exercise (PSE; McClelland et al., 1989) to measure implicit motives, a cue- and response-matched questionnaire version of the PSE (PSE–Q) to measure explicit motives and a traditional measure of explicit motives, the Personality Research Form (PRF; Jackson, 1974), in a study with 190 research participants. The authors found small and non-significant correlations between the PSE and the PSE–Q, but significant variance overlap between the

PSE–Q and the PRF within and across thematic domains (i.e., power, achievement and affiliation). These results reinforce the conclusion that implicit and explicit motives may well differ, and that the choice of instrument used to measure each, respectively, matters. Moreover, explicit and implicit motives may well relate differently to (manifestations of) ambitious entrepreneurship.

Issue 4: Measurement inconsistency

Of crucial importance is the lack of consistency in the measurement of achievement motivation across studies. A number of different psychological tests have been used erroneously by entrepreneurship scholars to measure achievement motivation. Thus, much of the research findings can be criticized due to inappropriate measurement instrument choices. Johnson (1990:42) provides an overview of the eight different measures that have been used in published studies of achievement motivation in entrepreneurs[31].

Of these tests, the two non-projective tests that appear to offer the most reliable measure of achievement motivation (and, specifically, its relation to entrepreneurship) are the MSCS-Form T, on the one hand, and the work and family orientation questionnaire (WOFO), on the other hand. We therefore briefly discuss them in more detail below.

1. **MSCS-Form T**. The MSCS-Form T is an instrument that was developed by Miner (1982) to measure an individual's motivation to perform certain roles required in specific situations. Miner utilized McClelland's implicit achievement motivation construct in formulating his domain theory of human behavior.

[31] The TAT and the MSCS-Form T are considered projective tests in that they allow an individual test subject to respond freely to ambiguous stimuli (such as pictures) in order to assess the individual's unconscious motives and desires. Thus, these tests treat the achievement motivation as an unconscious, implicit motive. The EPPS and PRF-E are forced choice, non-projective comprehensive personality measurement instruments that treat the achievement motive as a conscious variable. The LAMQ, MAS, SCT and WOFO are questionnaires that were developed specifically to measure achievement motivation, treating the need for achievement motivation as something that an individual is consciously aware of (Johnson, 1990: 41).

Specifically, he used it to assess motivation related to a "task inducement system." "A task inducement system is one in which the task itself provides the motivational inducements, not some outside individual or group. Entrepreneurial endeavors, according to Miner, are best characterized as task inducement systems. The entrepreneur who founds and manages a business is motivated to expend effort by the possibility of substantial rewards if successful, and the threat of bankruptcy if unsuccessful. To be successful in a task inducement system an individual must have a strong desire for 1) self-achievement, 2) avoiding risks, 3) feedback of results, 4) personal innovation, and 5) planning for the future" (Smith & Miner, 1985; cited in Johnson, 1990: 46).

2. **WOFO**. As described by Johnson (1990: 47),
   "The WOFO was developed to take into account the theorized multidimensionality of the achievement motivation construct and to be valid for both males and females (Spence & Helmreich, 1983). The questionnaire contains three subscales ("Mastery Needs", "Work Orientation", and "Interpersonal Competitiveness"), each of which focuses on a different dimension of achievement striving (Spence & Helmreich, 1978; 1983). Carsrud and Olm (1986) have reported two studies in which the WOFO was used to investigate the relationship between achievement motivation and firm performance. In the first reported study of male business owners it was found that the three scales of the WOFO were major predictors of business success only when the respondent was in the 1-49 percent ownership category. In a second study of females who owned 50 percent or more of the business, the WOFO showed no significant ability to predict sales."

Thus, although the test overcomes the one-dimensionality of other test instruments, early research results indicate mixed findings in the application to entrepreneurship and entrepreneurial firm performance.

Issue 5: Determining the scope of achievement motivation

A further criticism of prior entrepreneurship research is the treatment of achievement motivation as a generic, one-dimensional construct (Johnson, 1990). This underlying assumption is reflected in the choice of research methods and, specifically, the choice of instrument used to measure achievement motivation. Of the instruments available to specifically test achievement motivation, the MSCS-Form T and the Work and Family Orientation questionnaire (WOFO) appear to offer the most reliable and valid results (see the preceding discussion). In addition, these two psychological testing instruments take a multi-dimensional approach to the measurement of achievement motivation, explicitly acknowledging that this motivation may vary, depending on the context (Carsrud et al., 1989). More specifically, in the context of ambitious entrepreneurship, different dimensions of achievement motivation may impact (different manifestations of) ambitious entrepreneurship differently.

Apart from these four methodological issues, two *conceptual* challenges are worth discussing.

Issue 6: The personality trait approach to defining the entrepreneur

More broadly, attempts to develop a psychological profile or motive pattern of entrepreneurs have thus far failed to relate broader individual-level personality traits consistently to firm-level practices and specific firm-level outcome variables, such

as sales growth and profitability (see Chapter 2). In Johnson's view (1990: 50) "an understanding of psychological predisposition is useful only insofar as it allows for prediction of behavioural patterns that lead to specific outcomes." We agree with Johnson's (1990: 50) conclusion that theory-driven research designs from which causality can be inferred are yet to be developed, even 20 years after his critical evaluation of need for achievement studies in the entrepreneurship literature.

Murphy (2005) has found that tests of personality traits (i.e., the Big Five) have proven to be unreliable predictors of individuals' job performance. He cites an extensive literature review by Barrick et al. (2001) in which the estimated correlation of the observed personality-performance measures was .06 or lower for the following four Big Five dimensions: 'extraversion', 'emotional stability', 'agreeableness' and 'openness to experience'. The highest mean validity reported in their review was .12 for the trait 'conscientiousness'. We believe that this finding can be extrapolated to entrepreneurial (firm) performance.

Researching a possible relationship between implicit motives (as measured with the TAT), measures of self-attributed motives (i.e., explicit motivation, as measured by self-reporting questionnaires) – both of which were designed to assess the same motivational themes – and personality traits, Schultheiss and Brunstein (2001) found that implicit and explicit measures of the same motive generally do not overlap each other and may even predict different behavioural outcomes. Furthermore, they found almost zero correlation between TAT-based motive measures and scales assessing all Big Five personality traits. These results were consistent with a number of prior studies that have investigated the relation between TAT and self-reported measures of personality (King, 1995; McClelland, 1980).

These results are interesting in so far as they suggest that measurement instru-

ments designed to assess implicit and explicit motives also get at different levels or aspects of personality, which may conjointly shape an individual's attitudes, thoughts, feelings, and behaviours. An earlier study by Winter et al. (1998) similarly suggested that an individual's motives and traits may interactively predict behaviour over the course of many years. According to Schultheiss and Brunstein (2001), taken together, these findings underscore (p.83) "that implicit and explicit measures of personality capture aspects of personality that are unrelated, and therefore signify different things and predict different kinds of behavior". The authors further conclude that "research on personality may benefit considerably by acknowledging the value of implicit as well as explicit personality measures in describing the person, rather than, as has happened all too often in the past, preferring one approach to measurement over the other" (2001: 83). We return to this insight below in our recommendations for a future research agenda.

Other personality traits, such as 'locus of control', 'overconfidence' and 'self-efficacy' (see Chapter 2), are often cited as defining characteristics of entrepreneurs. However, they are also found to be characteristic features of other non-entrepreneurial business people, such as managers. Gartner (1985) provides an overview of variables that have been thought to have an impact on entrepreneurial behaviour: the need for achievement (McClelland, 1961); internal locus of control (Brockhaus, 1982; Sexton & Bowman, 1985); and risk-taking propensity (Sexton & Bowman 1985). However, little difference between entrepreneurs and managers on many of these individual-level dimensions have been confirmed, leading to disappointingly inconclusive results (Busenitz & Barney, 1997).

Considering the apparent overlap of personality traits among individuals with differing motives, goals and behaviours, on the one hand, and the lack of correlation

between implicit motives and personality traits, on the other hand, pursuing this line of research does not seem likely to produce either explanatory or predictive research findings.

Issue 7: Cherry-picking variables

A last criticism of the (then) extant body of research on achievement motivation and entrepreneurship offered by Johnson in 1990 is that previous studies have not taken into account the environmental context in which entrepreneurial activities occur. According to Johnson (1990: 50), in order "for the process of venture creation and management to yield to description, understanding, and prediction, the context in which it occurs must be explicitly considered in research models." Here, variables such as industry growth rates, macroeconomic indicators and others that may affect an entrepreneurial firm's success must be included in models. This implies that, on the one hand, even highly ambitious entrepreneurs may fail if the environmental conditions in which they operate are adverse. On the other hand, it also means that environmental factors (i.e., the presence or absence of the relevant incentives; see Chapter 7) may well have a mediating or moderating effect on an entrepreneur's level of ambition. Here, factors such as the social, cultural, legal and regulatory environment come to mind. Once again, we will return to this issue in our recommendations for a new research agenda below, in this chapter as well as in Chapter 8.

Literature since Johnson's 1990 critique

Only when the types of methodological issues discussed above have been clarified and the abovementioned inconsistencies have been resolved can we progress

in a meaningful way with an investigation of need for achievement as a motive of entrepreneurs in entrepreneurship research. Of course, since Johnson's (1990) review article, subsequent research linking achievement motivation and entrepreneurship has been published. As the summaries provided below will reveal, however, none of these studies offers any clearer or more conclusive results than the pre-1990 research.

Hansemark (2003) explored the relationship between need for achievement and locus of control, on the one hand, and the decision to start a new business, on the other hand. He applied two different methods in measuring need for achievement: with a thematic apperception test (TAT) consisting of six pictures and with the Cesarec–Marke Personality Schedule (CMPS). Locus of Control of Reinforcement was measured with Rotter's Internal–External Test. The results found that neither measure of achievement motivation had predictive validity for the decision to start a new business, while locus of control did.

Davidsson and colleagues (Davidsson, 1989; 1991; Davidsson et al., 2002; Delmar et al., 2003; Delmar & Wiklund 2008) have undertaken a number of studies that explore a possible relationship between growth aspirations and actual firm growth among small business owners in Sweden. While these studies did find a relationship between effort exerted to achieve growth and an individual's growth motivation, as well as between growth aspirations and actual firm growth, there were quite a number of mediating and moderating variables that lead to mixed and otherwise ambiguous results. For example, as regards the relationship between need for achievement and growth aspirations, Davidsson (1989) found that the positive relationship appears to be contingent on an expectation of financial gains from growth. Thus, satisfaction of the achievement motivation for these entrepre-

neurs is based on extrinsic incentives or motivations (i.e., profits). They concluded that only a minority of intrinsically motivated entrepreneurs is likely to pursue continued growth of their firms. Moreover, they report that "when growth is expected to result in a loss of control, this has a strong growth-deterring effect" on the entrepreneur's behaviour (222). In addition, Delmar et al. (2003) found that motivational patterns differ depending on the size of the firm (as measured by the number of employees), with deterrent incentives outweighing positive incentives for growth in firms with between 5-9 employees. Thus, the psychological reasons for further growth seem weak.

Interestingly, the seemingly disappointing results of the Davidsson et al. (2002) study are actually consistent with more recent insights from the field of psychology. In addition to the distinction between implicit and self-attributed motivations, motivation can be further differentiated between intrinsic and extrinsic motivations. To a large extent, these two aspects of motivation complement each other. As explained by Brody and Ehrlichman (1998: 207-208):

> "Intrinsic motivation is what leads people to seek out challenging activities that provide feedback regarding their competence and that they experience as being under their own control. When people engage in activities because of external rewards, pressures, or demands, or in order to live up to their own self-concepts, motivation is described as extrinsic… The conditions that foster intrinsic motivation are just those that provide incentives for *n* Ach, and the conditions that foster extrinsic motivation are just those that provide incentives for *san* Ach."

The result is the emergence of a new theoretical perspective "that emphasizes the fact that humans have both natural, inherent motivational tendencies and those that are developed in their interactions with society." Thus, the Davidsson et al. (2002) research findings lend further support to this perspective. Their findings also hint at a link between implicit versus self-attributed motivation and entrepreneurial intensity, whereby implicit motivation is linked with high entrepreneurial intensity and self-attributed motivation (in the absence of high implicit motivation) with low entrepreneurial intensity[32].

However, this overview of achievement motivation must be concluded with two important caveats. The first is that, at least where ambitious entrepreneurship is concerned, searching for a strong causal link between *n* Ach and entrepreneurship may never bear fruit. Specifically, the relevance and applicability of "need for achievement" in explaining (ambitious) entrepreneurship is undermined by the empirical observation that individuals high in *n* Ach *set moderate* achievement goals for themselves and take *calculated* risks. This crucial insight has been supported empirically by a number of studies over the years. Firstly, Atkinson and Litwin (1960) with their famous ring toss test, and McClelland (1985) and Weiner (1992) found that people who are high in need for achievement have a greater preference for tasks of *intermediate* difficulty or *moderate* levels of risk than do people low in need for achievement (Brody & Ehrlichman, 1998: 196-197). Furthermore, research suggests that people who are high in need for achievement work harder and perform better at moderately difficult tasks than they do at very easy or very difficult tasks (Karabenick & Yousseff, 1968; McClelland, 1985). This is consistent with McClelland's definition of need for achievement – that "doing

[32] Here it is suggested that entrepreneurial intensity among explicitly and extrinsically motivated entrepreneurs will be highly correlated with the presence of extrinsic rewards for entrepreneurial effort (e.g., increased sales, increased profits, et cetera). Thus, if the new venture flounders or requires some time to penetrate the market, these entrepreneurs may lose interest and even abandon the venture.

something better" allows a person to feel good about him or herself (referred to as "positive affect" in the psychology literature) – and that this also provides feedback on performance. According to Weiner (1980), intermediate task difficulty optimizes the opportunities for an evaluation of one's performance, in contrast with either very easy tasks (which most people would be able to perform well with little effort) or very difficult tasks (which few people would be able to perform well, and can always be attributed to "dumb luck") (Brody & Ehrlichman, 1998). Consequently, intermediate difficulty and moderate risk maximize both positive affect and information feedback. This is clearly at odds with any conception of ambitious entrepreneurship, which implies that entrepreneurs set exceptionally high goals for themselves and exert extraordinary efforts to achieve them. Second, as is well known in the literature (see above for some references), human motivation operates in interaction with environmental incentives or stimuli (as economists and psychologists, respectively, would refer to such outside influences; see more on this in Chapter 7).

Proposition 1: The relationship between explicit need for achievement and ambitious entrepreneurship is contingent upon the presence of relevant extrinsic incentives in the environment[33].

Proposition 2: The relationship between ambitious entrepreneurship and implicit need for achievement is hill-shaped.

[33] In these and subsequent propositions, the dependent variable is either ambitious entrepreneurship generally or a specific manifestation of ambitious entrepreneurship particularly. In the first case, the independent variable is expected to have the same impact on all three aspects of entrepreneurial intensity (i.e., sales growth, employment creation and innovation). In the latter case, the effect of the independent variable is expected to be specific for one of the three manifestations of ambitious entrepreneurship.

Motive-goal congruence and entrepreneurial intensity

A recent trend in the field of motivational psychology is the increased interest in the complex interaction between implicit motives and conscious goals. In addition to its impact on an individual's life satisfaction and mental health, the congruence of individuals' implicit motives and their explicit goals also appears to have a significant influence on their commitment to achieving the goals that they set for themselves (Hofer et al., 2006; 2010). Hofer et al. (2010: 747) cite research findings that indicate that an individual's "capacity for accessing implicit motives promotes congruence between the implicit and the explicit motivational system: Individuals able to test a conscious goal for its fit with their implicit motivation commit themselves more fully to self-congruent goals". Consequently, we posit that motive-goal congruence can function as a proxy for entrepreneurial intensity.

> **Proposition 3:** There is a strong, positive correlation between motive-goal congruence and ambitious entrepreneurship.

This proposition is supported by the work of Biernat (1989), who found that levels of performance attained were the highest by individuals who scored high in both implicit achievement motivation and explicit achievement orientation assessments. This finding underscores the hypothesis that implicit achievement motivation and explicit achievement orientation have an interactive effect on performance.

> **Proposition 4:** Ambitious entrepreneurs possess both implicit and explicit needs for achievement.

4.3 ALTERNATIVE MOTIVES DRIVING AMBITIOUS ENTREPRENEURSHIP[34]

Kolvereid (1992) found that, among a small sample of Norwegian entrepreneurs, a high level of achievement motivation appeared to be related to revenue and employment growth aspirations. Interestingly, he also found evidence that "entrepreneurs with no growth aspirations have a tendency to be driven by independence and opportunism, entrepreneurs with revenue growth aspirations by welfare and tax considerations, and entrepreneurs with both revenue and employment growth aspirations by their achievement motive" (Kolvereid 1992: 215). These early findings relate to a more fundamental critique on prior work on the motivation – entrepreneurship link: that it reveals biased attention for the need for achievement motivation. That is, the interest of entrepreneurship researchers in achievement motivation has, to a large extent, come at the cost of other dimensions of motivation. Thus, a notable gap in the extant research on the psychological disposition of entrepreneurs is the lack of attention given to social motives other than achievement motivation. After all, in addition to achievement motivation, McClelland and his contemporaries already identified and explored three other influential social motives that direct human behaviour: need for power; need for affiliation; and need for intimacy. Moreover, below we will propose a fourth and a fifth motive: need for independence and need for innovation. To what extent might a broader perspective on multiple motives facilitate progress in the motivation – entrepreneurship research tradition?

[34] Many of the motives suggested and studies reviewed in this section are discussed in more detail in Chapter 5, albeit in the context of applied empirical work in entrepreneurship rather than the fundamental psychological perspective suggested in this chapter.

Before discussing these additional motives, a few remarks are worth making. First, tests such as PSE and TAT assess an individual's dominant implicit need. So, such tests do not produce five independent measures of five different implicit needs, but are rather used to distract a kind of ranking of implicit needs from the individual's responses. This implies that the propositions suggested above and below relate to the expectation as to what the impact of a *dominant* need will be on (manifestations of) ambitious entrepreneurship. Second, regarding these propositions, many of these will be rather speculative and tentative, given the paucity of earlier work on non-achievement motives in the entrepreneurship literature. This means that each and every proposition immediately implies a suggestion for future work. Third, all propositions (including Propositions 1 to 4 above, for that matter) are ceteris paribus. In empirical work, of course, many other variables have to be included in a comprehensive model (as explained above, whilst discussing issue 7 in our list of critiques of need for achievement research, as well as in the other chapters in this report; see Parker et al., 2010, for an example, albeit without measures of motives).

Need for power

Power motivation reflects an individual's need to have an impact on the lives of others. Implicit power motive, or *n* Power, is tested with methods such as the TAT, in the same way as *n* Ach and other implicit motives. As is the case where other motives are concerned, the way in which the power motive is expressed in everyday life behaviour is influenced by cultural, situational and personality factors (Brody & Ehrlichman, 1998). For example, it has been shown that social class values influence the behaviour a man will use to express his power motive. Wor-

king-class men are more likely to express their power motive with aggressive behaviour than are middle-class men (Winter, 1973). Despite the effect of such intervening variables, research findings suggest that individuals high in *n* Power consistently choose careers in which they can have an impact on others, such as in politics, teaching, journalism and business management, to name a few. Furthermore, these individuals are, in general, particularly concerned with prestige (McClelland, 1975; Winter, 1973).

Given our definition of ambitious entrepreneurship, which emphasizes the aim to create value beyond self-sufficiency, we expect the association with the need for power to be positive, assuming that high-value generation of any kind – i.e., employment creation, sales growth and innovation – is associated with prestige[35]. More importantly, we believe that there may be a strong, positive link between the power disposition and innovativeness. In general, successful inventions have an impact on people's lives (think about the impact of Microsoft Office software alone). Therefore, those who want to have an significant impact on the lives of many can satisfy this power need by inventing a product, service or process upon which many people will come to rely.

Proposition 5: Need for power is positively linked with ambitious entrepreneurship.

Proposition 6: Ambitious entrepreneurs with a strong implicit power disposition will possess high innovation intensity.

[35] The paucity of entrepreneurship research on the need for power comes as a surprise, given that Baumol (1990) defines entrepreneurs as "persons who are ingenious and creative in finding ways to add to their own wealth, power, and prestige" (emphases added).

Need for affiliation

Two other social motive dispositions identified by McClelland are the need for affiliation and the need for intimacy. The affiliation motive is defined as "the need to be with people and expressed as concern for establishing, maintaining, and restoring positive relationships with others" (Brody & Ehrlichman, 1998: 212). Individuals high in *n* Aff seek to avoid interpersonal conflicts, which may, at times, lead them to behave in ways that are at odds with other goals. They are generally very socially-engaged, making more phone calls, writing more letters, paying more visits and the like than do people low in *n* Aff (McClelland, 1985). Interestingly, French (1955) found that people high in *n* Aff prefer friends to experts as business partners. When working in a group, high *n* Aff individuals prefer feedback on how the group is getting along together rather than on how the group is performing on the task that it has been assigned (French, 1955). In experimental settings, individuals high in *n* Aff achieved the best performance when the incentive offered was "to please the experimenter" (French, 1955; cited in Brody & Ehrlichman, 1998: 213). We are not aware of any *n* Aff or *san* Aff work in an entrepreneurship context. However, given the nature of ambitious entrepreneurship, with a strong focus on individual performance outcomes, we expect a negative association with ambitious entrepreneurship[36].

> **Proposition 7:** Need for affiliation is negatively linked with ambitious entrepreneurship.

[36] Even though there seems to be no individual-level *n* Aff or *san* Aff work in an entrepreneurship context, Autio et al. (2011) found that national-level societal institutional collectivism associated negatively with entrepreneurial entry but positively with individual-level entrepreneurial growth aspirations, reflecting the different effect of societal institutional collectivism on variance-inducing (entry) and resource-mobilising (growth) behaviours.

Need for intimacy

According to McAdams (1980), individuals motivated by intimacy seek close, warm relationships characterized by openness, contact joy and sharing (Brody & Ehrlichman, 1998: 213). They tend to use the word "we" more often, they stand closer to others and are generally more intimate in their social interactions (McAdams et al., 1984). Individuals who have a predominant intimacy motive disposition are often described by others as being more sincere and loving than are individuals low in intimacy motivation (McAdams, 1980). Again, entrepreneurial work on this motivation is missing. The nature of the need for intimacy does suggest that an individual with this motive disposition is less likely to focus on high-growth in a broader context, as implied by ambitious entrepreneurship, given the amount of attention that such a person would be expected to give to managing individual relationships[37].

> **Proposition 8:** Need for intimacy is negatively linked with ambitious entrepreneurship.

Of course, in line with the *n* Ach and *san* Ach distinction, it is important to distinguish the implicit needs for power, affiliation and intimacy from the explicit expressions: n Power vs. san Power, *n* Aff vs. *san* Aff, and n Int vs. san Int (again, each associated with different measurement instruments).

Finally, our literature review suggests that there are two further motive dispositions that could be added to the 'classic' set of four (i.e., the needs for achievement, power, affiliation and intimacy): the need for independence and the need for innovation. The former, the need for independence, is recognized in the entrepreneur-

[37] Again, entrepreneurial work on this motivation, *san* Int or *n* Int, is missing. Maybe, entrepreneurship network studies on strong ties are insightful here.

ship literature as an important, though not well researched, motivation (see, e.g., Van Praag et al., 2011). The latter, the need for innovation, is largely unexplored, to date. Both motives are likely to be important in an entrepreneurship context. On the one hand, a key feature of being an entrepreneur is independence. For instance, in the literature on self-employment, this is referred to as an important motivation for people to establish their own business (Blais & Toulouse, 1990; Kolvereid, 1992; Parker, 2009). On the other hand, the freedom to be innovative is directly related to the very definition of entrepreneurship. Particularly, as argued above, one manifestation of ambitious entrepreneurship is the aim to be innovative.

Need for independence

When people think of entrepreneurs, they often imagine someone who is a strong-willed individualist. Therefore, formulating an independence motive that is conceptually and empirically sound (vis-à-vis the psychology literature) makes sense. Thus far, two definitions have been operationalized in entrepreneurship research[38]. The first is a composite resulting from a questionnaire used by Blais and Toulouse (1990) in their international survey of entrepreneurs. Participants answered a number of questions that were believed to indicate the relative importance of their need for independence. Specifically, they rated the importance of the following: "to be my own boss, to work for myself; to have considerable freedom to adopt my own approach to my work; to control my own time; to have opportunity to lead, rather than be led by others; and, to be able to work with people I choose" (Blais & Toulouse, 1990: 8).

The second definition of the independence motive describes an individual's desire for freedom, control, and flexibility in the use of one's time (Carter et al., 2003:

[38] A related line of work focuses on entrepreneurship – autonomy – happiness nexus.

Zellweger et al., 2011). In a way, with this second definition, an implicit independency motive is captured (*n* Indep), whereas the first definition – and the associated questionnaire-based measurement instrument – relates to an explicit need for independence (*san* Indep). Following Kolvereid (1992)[39] and Van Praag et al. (2011), we may assume that the need for independence is positively related to self-employment, but that the aggregate relationship with entrepreneurial intensity and thus ambitious entrepreneurship is hill-shaped.

> **Proposition 9:** The relationship between need for independence and ambitious entrepreneurship is hill-shaped.

The reasoning behind this proposition is as follows. Firstly, in order to maintain one's status as self-employed and thus as being independent requires that the individual achieve a certain degree of success. In combination with the appropriate environmental incentives, this can translate into high entrepreneurial intensity with respect to sales growth and/or innovation. However, overall growth might be limited to the extent that sales growth is dependent on employment growth, which in turn infringes on the entrepreneur's independence. That is, managing a workforce limits, to a certain extent, one's latitude in decision-making. This may create reluctance to grow the firm beyond a point that necessitates a large workforce.

Need for innovation

According to Carter et al. (2003) and Zellweger et al. (2011), "the innovation motive describes an individual's intention to accomplish something new. Founders will

[39] Kolvereid (1992) found that, among a small sample of Norwegian entrepreneurs, a high level of achievement motivation appeared to be related to revenue and employment growth aspirations. Interestingly, he also found evidence that "entrepreneurs with no growth aspirations have a tendency to be driven by independence and opportunism, entrepreneurs with revenue growth aspirations by welfare and tax considerations, and entrepreneurs with both revenue and employment growth aspirations by their achievement motive" (215).

likely display greater levels of independence and innovation motives than employees." To the best of our knowledge, this need has not yet been explicitly defined in the literature, nor have any measurement instruments for an explicit need for innovation (*san* Inn) or an implicit need for innovation (*n* Inn) been developed[40]. Innovation has always been a central issue in the entrepreneurship literature, as is immediately clear from the Schumpeterian perspective. As yet, though, innovation has not been viewed as an entrepreneurial motive, but rather as part of the definition of entrepreneurship or as an entrepreneurial outcome (see Chapter 1), with the exception on some work on innovation as a motive and its impact on new firm growth (see Chapter 6). Given our definition of ambitious entrepreneurship as being associated with the aim to create value beyond the provision of self-sufficiency and given our assumption that innovation is a key aspect of value creation, we predict that ambitious entrepreneurship and the need for innovation are positively linked as far as this aspect of entrepreneurial intensity is concerned.

> **Proposition 10:** Need for innovation is positively linked with ambitious entrepreneurship.

Because we are not aware of any entrepreneurship work on this, we refrained from predicting differential outcomes arising from explicit versus implicit motive dispositions with respect to the needs for power, affiliation, intimacy, independence and innovation. This is something that has to be explored in future work.

[40] An insightful literature that may well be related to the need for innovation deals with entrepreneurial creativity (see, e.g., Nooteboom & Stam, 2008).

4.4 CROSS-CULTURAL CONSIDERATIONS

From a cross-cultural, comparative perspective, Hofer et al. (2010) challenge the notion that the cultural context implies variability in basic human psychological mechanisms and processes. While they accept that behaviour, as affected by normative sociocultural demands such as role obligations and communication styles, may vary across cultures, they argue that basic principles in human functioning that help to predict individuals' mental processes and observable behaviours can be identified in humans irrespective of the cultural context (Hofer & Bond, 2008). They state that, "while accepting the position that an individual's striving is strongly conditioned by sociocultural norms that define what is socially desirable and good or socially undesirable and bad, we propose that … the alignment of consciously represented goals and implicit motives … play a decisive role in the process of individuals' goal commitment" (Hofer et al., 2010: 751-752). Therefore, any cross-cultural study of ambitious entrepreneurship must be designed in such a way as to separate relevant individual-level variables and cultural variables when necessary, but also to then relate and integrate them where appropriate.

The extant body of literature on cross-national and cross-cultural comparisons of entrepreneurs and entrepreneurship (see also Chapter 5 and Chapter 6) tends to emphasize national cultural differences and country clusters, relying in particular on Hofstede's and/or Trompenaar's cultural dimensions (Lee & Peterson, 2000; Tiessen, 1997; Verheul et al., 2001). According to research by Wildeman et al. (1999), differences in the prevalence of self-employment can be linked to cultural factors. In a study including data from a set of OECD countries, they found that countries in which individuals expressed dissatisfaction with their lives and with

society in general, as well as frustration in previous employment relationships, are more likely to start their own business. Further, they cite the work of Van Uxem and Bais (1996), whose research found that approximately half of 2,000 new Dutch business-owners included in their sample cited dissatisfaction with their previous job as an incentive to start their own business. So, although the majority of research into the motivation to become an entrepreneur focuses on "positive" incentives, there may well be many "negative" incentives that lead people to this decision. An investigation into the both the ambitions and performance outcomes of these two groups is certainly an area to be explored in future research. In his study of growth aspirations among Norwegian entrepreneurs, Kolvereid (1992) found that the reluctance to grow one's business was much higher among Norwegian entrepreneurs than among a comparable sample of entrepreneurs in Great Britain and New Zealand (see more recent international comparative research on ambitious entrepreneurship in Chapter 6). This has led him to conclude that growth aspiration may have a cultural component, a hypothesis that requires further research. Various studies that have explored the relationship between Hofstede's cultural dimensions[41] and the prevalence of entrepreneurship have produced inconclusive results. These studies, by and large, have yielded findings that are just as inconclusive or inconsistent as those discussed above that erroneously operationalize achievement motivation. Furthermore, they shed little if any light onto differences in entrepreneurial motivation across countries and ambitious entrepreneurship in particular. A more fruitful approach could be to try to link national-level cultural

[41] Recent work in cross-cultural studies of implicit motivation, social values and life satisfaction (see, for example, Hofer et al., 2006) has utilized the Schwartz Value Survey (Schwartz, 1994). According to Hofer et al. (2006), "[t]he items of the SVS represent 10 universal value types (e.g., power, conformity) that, on a more abstract level, reflect two bipolar dimensions (higher-order value types): Openness to Change (self-direction and stimulation) versus Conservation (conformity, security, and tradition) and Self-Enhancement (achievement and power) versus Self-Transcendence (benevolence and universalism). Openness to Change overlaps with Individualism and Conservation with Collectivism (Triandis, 1996). Similarly, Schwartz (1994) argued that this dimension, which focuses on the person's self-government or social embeddedness, is a key variable when examining Individualism/Collectivism" (758).

dimensions to the most prevalent individual-level implicit motivations aggregated at the national level. For example, need for affiliation and need for intimacy might be linked to collectivism and femininity, while need for independence and need for power may be linked to individualism and masculinity. The only study of which we are aware that makes an, albeit limited, attempt in this vein is that by Blais and Toulouse (1990)[42].

In their research, Blais and Toulouse (1990) attempted to measure eight different motives (achievement, independence, opportunity, money, accommodation, recognition, escape and communitarianism) of entrepreneurs with a questionnaire that was administered in fourteen different countries. In analyzing the results, attempts were made to link various motives with various dimensions of culture. For example, countries that scored high on the independence motive were also, in many cases, countries that fall into Hofstede's country cluster that score high for individualism. However, given the variety of methodological issues discussed above and the year that this study was published, it is recommended that new research be undertaken with the appropriate research design and methods taken into account.

Two early studies by McKeachie (1961) and Gallimore (1974) of American school children found a very strong correlation between the students' implicit need for affiliation motive, or *n* Aff, and their achievement performance on a number of educational tasks, and *no* correlation between *n* Ach and the students' performance on these tasks. High performance was evoked by the presence of an incentive that appealed to the students' *n* Aff motive; namely, the students were instructed by a teacher who they judged to be warm and friendly. Thus, the students performed well in order to "please the instructor", which echoes French's (1955) "to please the experimenter" findings in earlier lab experiments. Gallimore (1974) and others

[42] Additionally, of course, macro-economic conditions and formal institutions play a role here. See Chapter 7 for more on this.

have concluded that for individuals high in *n* Aff, "the incentive associated with doing more difficult tasks is social approval or affection rather than the achievement incentive" (McClelland, 1985: 352). In particular, Gallimore (1974) found that affiliation incentives are more important to students of Hawaiian ancestry than is individualistic achievement.

This last insight has interesting implications for cross-national and cross-cultural studies of entrepreneurship and, especially, ambitious entrepreneurship. What these research findings indicate is that even within a country like the United States, which has a strong national culture and a clear set of national values ("rugged individualism", competitiveness, achievement, et cetera), ethnic cultural attributes may still result in individuals with profoundly different implicit motives. Furthermore, this suggests that although the environment plays an important role in influencing behaviour, it cannot alter who a person fundamentally is. Thus, any study of ambitious entrepreneurship in the United States would need to be carefully designed to distinguish the differences in individuals' implicit motives and the relevant environmental incentives that can evoke entrepreneurial behaviour by these individuals.

Building on these last insights, we hypothesize that entrepreneurial intensity can be equally high among individuals with differing implicit and explicit motivation orientations, so long as the individuals possess *congruent* motives and goals. Of course, it could also be argued that some motive dispositions lead to greater entrepreneurial intensity and are therefore more conducive to greater entrepreneurial firm success. However, this remains an issue to be addressed in future research, an issue we return to in Chapter 8.

4.5 CONCLUSION

The above review of motivational research in entrepreneurship and psychology makes very clear that prior work took a wrong turn (1) by ignoring deeper differences between explicit and implicit motives, (2) by failing to use the appropriate advanced measurement instruments, (3) by being biased to one specific need only (achievement), (4) by missing the key issue of motivational congruence, and more. Therefore, we believe that time is ripe for a renaissance of motivational research in entrepreneurship, correcting the mistakes made in earlier work. Above, we suggested a series of propositions that illustrate the kind of issues that could be explored in such a modern take on motivational research in entrepreneurship.

CHAPTER 5

GROWTH AMBITION

In this chapter, the focus will be on the growth ambition of entrepreneurs. While most economic literature assumes that entrepreneurs strive to maximize profits, implying that a willingness to grow is simply implicitly assumed to exist, many entrepreneurs in fact have no ambition to grow their firms (Davidsson, 1989). Even though this chapter focuses on growth as a type of value creation, other types are possible such as introducing innovation, establishing new strategic alliances and social value creation. Entrepreneurs without the ambition to create any type of value engage in marginal entrepreneurship. Given the societal importance of firm growth, it is highly relevant to investigate the characteristics and determinants of the concept of growth ambition. First, we will consider the concept of growth ambition itself. Subsequently, we investigate extant conceptual and empirical literature on growth ambitions (mainly based on PSED studies) and growth expectations (based on GEM studies) to derive an overview of the antecedents of growth ambition and the associated causal explanations.

5.1 THE CONCEPT AND ITS THEORETICAL UNDERPINNINGS

The growth ambition of an entrepreneur can be defined as the entrepreneur's desire to grow her or his firm – by whatever indicator(s), such as, e.g., revenues, profits, employees and / or export rate – and her or his willingness to strive for its attainment. A review of the literature first of all reveals that the concept of growth ambition is closely related to concepts such as *Growth Willingness*, *Growth Aspirations*, *Growth Motivation*, and *Growth Attitude*. To illustrate the heterogeneous (and inconsistent) labelling in the literature, as well as the associated interrelated (and inconsistent) measurement models, we will outline below several studies of a group of academics that made substantial – and widely accepted – contributions to our understanding of growth ambition. This also serves to outline the theoretical underpinnings of the concept. Additionally, it helps to pave the way for the discussion of the empirical results in the next section.

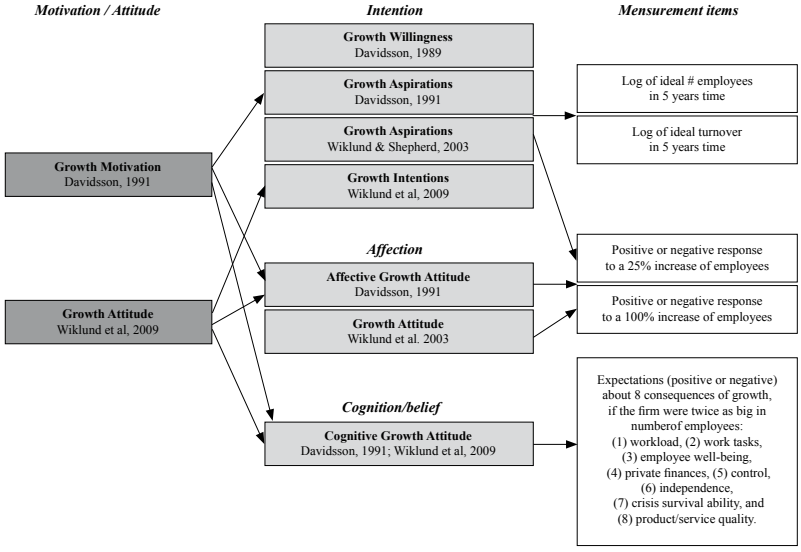
A graphical overview of the different concepts used and the various measurement instruments is provided in Figure 5.1. It is important to stress that Figure 5.1 reflects a *measurement model*– i.e., this reflects how various empirical studies have operationalized concepts. It serves to improve our understanding of the overarching concept of growth ambition as such. As will become clear in the next section, there is an overlap between the measurement and conceptual models that are used in the literature to study the antecedents of growth ambition. As follows from Figure 5.1 (see the left-hand side of the figure), the two most comprehensive concepts are *Growth Motivation* (Davidsson, 1991) and *Growth Attitude* (Wiklund et al., 2009). Despite the different labels, they have almost identical conceptual meaning. Namely, as illustrated in Figure 5.1, both concepts are second-order con-

structs that consist of three reflective and very similar first-order constructs. This "tripartite view" (Wiklund et al., 2003) reflects that attitudes/motivations consist of (1) an intentional component, (2) an affective component, and (3) a cognitive component (Eagly & Chaiken, 1993).

First, the intentional first-order construct itself goes by three different labels: *Growth Aspirations* (Davidsson, 1991; Wiklund & Shepherd, 2003), *Growth Intentions* (Wiklund et al., 2009), or *Growth Willingness* (Davidsson, 1989). However, all three labels are measured identically (see the right-hand side of Figure 5.1), using logarithms of the percentage difference between a firm's present size – in terms of both the number of employees and turnover – and an "ideal size" five years ahead, as stated by the respondents (Davidsson, 1989). This intentional component is related to the theory of planned behaviour (Wiklund & Shepherd, 2003; see also Chapter 2). In this perspective:

> "Intentions are assumed to capture the motivational factors that influence a behaviour; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert in order to perform the behaviour. As a general rule, the stronger the intention to engage in a behaviour, the more likely should be its performance" (Ajzen, 1991: 181).

Figure 5.1: Illustrative concept labels and measurement models



Second, the affective first-order construct is referred to in the literature as *Affective Growth Attitude* (Davidsson, 1991;Wiklund et al., 2009), or simply *Growth Attitude* (Wiklund et al., 2003). It is measured as the respondent's feelings, moods or emotions in reaction towards a hypothetical increase in the number of employees by 25 and 100 per cent, respectively. Respondents answered whether such an increase would be mainly negative or mainly positive. They were then asked whether they perceived such a negative/positive outcome as "somewhat," "rather strongly" or "very strongly" positive/negative (Wiklund et al., 2003). The resulting single item bipolar seven-point good/bad scale is a common variable to measure attitude toward behaviour (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

Third, the cognitive first-order construct is labelled in the literature as *Cognitive Growth Attitude* (Davidsson, 1991; Wiklund et al., 2009). Davidsson (1991) explains that this dimension is related to, for instance, expectancy-value models (Vroom, 1964) and cognitive structure attitude models (e.g., Fishbein & Ajzen 1975). These approaches focus on the behavioural effects of expectations and beliefs about the consequences of performing an act. As the measurement items reflect, this, for instance, refers to the respondent's self-reported expectations of (positive or negative) consequences of growth with respect to (1) workload, (2) work tasks, (3) employee well-being, (4) private finances, (5) control, (6) independence, (7) crisis survival ability, and (8) product/service quality.

As becomes visible in Figure 5.1, the above labels and measurement models are not used consistently in the literature, not even by the same researchers. For instance, Wiklund et al. (2003) operationalized *Growth Attitude* simply by considering the respondent's attitude towards a hypothetical 100 per cent increase in the number of employees. In addition, focusing solely on *Growth Aspirations*, Wiklund and Shepherd (2003) formed an index of four items. In addition to the two items that operationalize *Growth Willingness/Aspirations/Intentions*, they also included the two items that were used to measure *Affective Growth Attitude*.

Finally, it is worth mentioning that growth ambition is also frequently defined and operationalized in a rather pragmatic approach, as, for instance, in the Global Entrepreneurship Monitor and PSED studies. As Stam et al. (2009) and Verheul and Van Mil (2011) indicate, this pertains, for example, to the expectation to "employ 20 or more employees within five years after the start of the firm", or a question about whether or not the respondent states that s/he wants "my company to be as large as possible" (rather than "I want a size I can manage myself or with a

few key employees"). So, clearly, the treatment of the growth ambition construct in the literature is rather messy, both in terms of concepts as well as measures[43]. Next, we will first review the key findings about the antecedents of the concepts introduced in Figure 5.1.

5.2 ANTECEDENTS OF GROWTH AMBITION

Not all entrepreneurs intend to grow their firms. Studies therefore aim to explain the antecedents of the concepts related to growth ambition. The studies referred to in Figure 5.1 have developed and empirically tested several conceptual frameworks for the explanation of growth motivation, but also for the explanation of the underlying concepts of growth intention and growth affection. The basis for these results is Swedish data on owners of small businesses.

In terms of the conceptualization of growth ambition as discussed above, the review below consists of three parts. First and second, this involves the first-order concepts of growth intention and (affective) growth attitude. The concept of growth beliefs does not constitute a relevant dependent variable, since this is mostly used as an antecedent to growth intention and growth affection. Third, our review of empirical findings comprises the overarching concept of growth motivation[44] – i.e., the second-order concept in Figure 5.1. The empirical results of the influential studies referred to in Figure 5.1 form the backbone of the review. We complement them with relevant findings from other studies.

[43] A similar observation is made in Chapter 4 relating to motivational research in entrepreneurship. Combined, this implies a clear need to clean up messy conceptual and measurement practices in the entrepreneurship literature, as this current state of affairs hampers the cumulative build-up of insight and evidence.

[44] It is important to recognize that here, in this applied empirical research tradition, the motivation label is used much more loosely than in the fundamental psychological motivation literature reviewed in Chapter 4. For now, it suffices to note that the growth motivation variable in this chapter implies an explicit motivation in the sense of Chapter 4. This is true for all different motives discussed in this chapter.

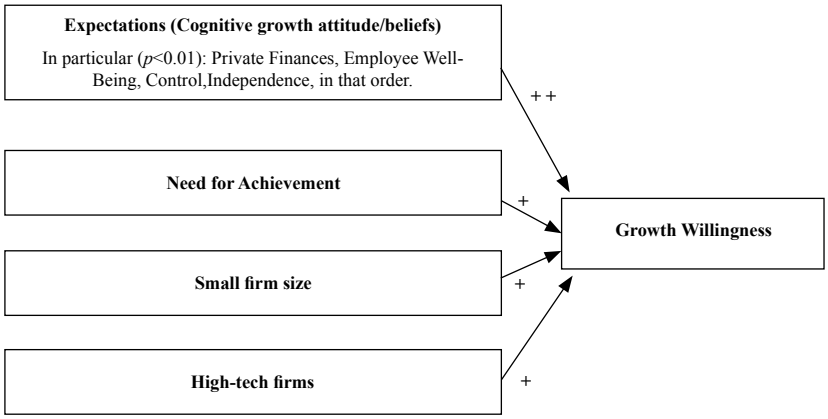
Antecedents of growth intention / willingness

Davidsson (1989) focused on the explanation of growth willingness. Figure 5.1 visualizes that Davidsson operationalized growth willingness as the average of two items about the ideal size of the firm. Several conceptual models were considered in this study. One model included four independent variables (Adjusted $R^2 = 0.29$): firm type (high-tech or not), firm size, need for achievement (*n* Ach; see Chapter 4), and growth beliefs/expectations. The latter combined the eight items that reflect one's positive/negative cognitive attitude to (consequences of) growth (see Figure 5.1). All four dependent variables had a positive, statistically significant effect ($p < 0.05$; see Figure 5.2). Below, we discuss these findings in some greater detail, and we will relate them to findings from other studies. We do this by identifying three groups of determinants: contextual, organizational, and personal determinants.

Contextual determinants

Davidsson (1989) found that entrepreneurs in high-tech firms tend to have higher growth willingness. This points out that growth willingness is dependent on the firm's context, such as its industrial focus. Kolvereid (1992), for instance, found that especially manufacturing firms had the ambition to grow, which was much less the case for firms in the service and construction sectors. Dutta and Thornhill (2008) propose that an increase (decrease) in the perceived hostility of the firm's competitive environment results in the downward (upward) growth intention.

Figure 5.2: Determinants of growth willingness



Source: Davidsson (1989)
+ : regression coefficients range from .12 to .20 ($p < 0.05$)
+ + : regression coefficient is .41 ($p < 0.05$)

Another contextual variable involves the firms' geographical location. Rural businesses typically have relatively low ambition levels – i.e., they tend to be characterized as lifestyle rather than entrepreneurial ventures (Mochrie et al., 2006). This reflects a limited need for growth. At the same time, rural areas might be characterized by limited opportunities for growth, as they are remote from markets, suppliers, labour, and other resources (Mochrie et al., 2006). Kolvereid (1992), however, found no differences in terms of the geographical location of firms (rural/urban).

Firm-level determinants

Firm size is typically included in empirical studies as a control variable. Davidsson (1989) found that entrepreneurs in small firms tend to have higher growth

willingness. Growth willingness appeared to be strongest in small firms (with of up to five employees). Kolvereid (1992), however, found no such effect. As a possible explanation it was mentioned that the underlying sample included many self-employed, life-style/hobby entrepreneurs. More generally, research suggests that firm-specific characteristics matter.

Kolvereid (1992) found that ambitious entrepreneurs tend to differ from entrepreneurs with no ambitions in terms of a greater distance to customers, a larger percentage of sales export, a somewhat smaller number of customers, and a larger number of competitors. Furthermore, Kolvereid found that entrepreneurs are more likely to express growth ambitions when they have experienced successful growth in the past (both in terms of turnover and employees). Also Mochrie et al. (2006) and Wiklund and Davidsson (2009) mention this relationship. Past actions and performance of the firm might impact growth intentions in other ways as well. Davidsson (1991), for instance, mentions that a firm's success in terms of product and process innovations might reduce growth intention, because this increases the firm's profitability and probability of survival.

Personal determinants

Davidsson (1989) found that entrepreneurs with a higher "inner drive" towards achievement (*n* Ach) tend to have greater growth willingness (but see Chapter 4 for a critique on this type of work). However, this effect appeared to exist for growth willingness in terms of turnover rather than in terms of number of employees, or the measure that combined both items. This seems to reflect the importance of financial rewards as a measure of achievement satisfaction.

As another personal characteristic, entrepreneurs with more positive expectations

about growth consequences tend to have higher growth willingness (Davidsson, 1989). The effect size of expectations (0.4) was at least twice the size of the other three effects in this study. Controlling for firm size and type, also the individual effects of all eight expectation items were tested (Adjusted R^2 = 0.29). Overall, it was found that growth willingness increases the more positive the perceived outcomes of growth. Yet, not all items were statistically significant. In line with economic theories (i.e., profit maximization), private finances (money) had the strongest effect, but also many non-economic items showed strong effects (notably employee well-being, control, and independence). Stability, quality and work tasks were not significant. Overall, these results strongly support the underlying expectancy-value theory.

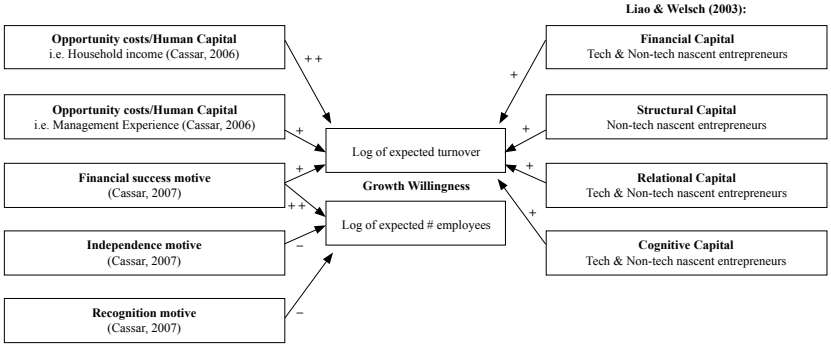
In subsequent exploratory research – inspired by Herzberg's (1966) motivation-hygiene theory – Davidsson (1989) found that the effects of expectations are not linear. For instance, the expected negative consequences in terms of control, employee well-being and workload (deterrents) appear to outweigh – on average – the expected positive consequences of these items (motivators). Conversely, independence appears to be particularly strong as a motivator. These findings for control and independence seem to reflect the importance for small business owners to grow in order to reduce their dependence on external actors, but at the same time the fear exists that growth may reduce their internal control.

Implicit in the measurement of growth intention – i.e., the *ideal* size of the firm – is the notion that entrepreneurs might have in mind a certain ideal and/or maximum size of the business. In this regard, Cliff (1997) formulated the proposition that an entrepreneur's growth intentions are dependent on whether or not the firm has reached the so-called maximum business size threshold. This reflects that intenti-

ons may not only influence the size of a firm, but also that current size may affect intentions. This is related to the abovementioned finding that smaller firms tend to have higher growth willingness (Davidsson, 1989). Cliff (1997) found qualitative evidence that this effect may depend on the maximum business size threshold that the entrepreneur has set for her or himself. Above this threshold, the intention to grow no longer exists.

Another series of studies is based on PSED data, which is a US panel data on nascent entrepreneurs. This line of work is summarized in Figure 5.3.

Figure 5.3: PSED-based findings for growth willingness



All effects are significant at least at $p < .05$.
+ : path coefficients for which $p < .05$.
+ + reflects regression coefficients greater than .38.

Cassar (2006; 2007) investigated additional personal determinants of growth intentions: namely, expected revenues and expected employment in the fifth year of operation. Hence, this dependent variable is very similar to the operationalization of growth intention as used by Davidsson (1989), which involved the ideal firm

size five years from now. In terms of determinants, Cassar (2006) focused on the opportunity costs of nascent entrepreneurs – as measured by elements of human capital. Indeed, the results confirmed that nascent entrepreneurs with high current household income and managerial experience have the intention to start firms with larger future sales (see the left-hand side of Figure 5.3). However, education did not contribute to the explanation of intended sales size. Further supporting the opportunity cost argument, household income was not related to the expected number of employees in five years time.

Kolvereid (1992) also found that entrepreneurs with higher levels of education tend to have growth aspirations (in terms of both revenues and employees). However, to the extent that entrepreneurs with low levels of education tend to have revenue growth aspirations, these tend to be stronger than for entrepreneurs with high levels of education. Kolvereid (1992: 218) speculates that "money is more important for the poor" and that entrepreneurs with little education might be irrealistic dreamers. Finally, as a finding related to issues of human capital, Kolvereid found no differences related to entrepreneurial experience.

An additional result in Cassar (2006) involved that women are less likely to express high levels of expected sales than men. Although Kolvereid (1992) found no bivariate association between gender and growth intention, other studies do suggest a gender effect. Cliff (1997), for instance, proposes that women are more likely than men to establish a maximum business size threshold, above which they have no growth intention. Furthermore, to the extent that they are present, these thresholds tend to be lower for women than for men.

Cassar (2007) reported Spearman correlations between so-called career motives to start the new business, which is yet another group of personal determinants,

and the growth intentions of nascent entrepreneurs in terms of both sales and employment. Except for independence, the motives of financial success, self-realization, innovation, roles (for employment growth intentions only), and recognition (in this order), were all significantly correlated with growth intentions. Besides determinants of growth intentions, Cassar (2007) also investigated determinants of two additional measures of growth preference. Similar to the findings displayed in Figure 5.3, preference for unconstrained growth (i.e., "I want the firm to be as large as possible" rather than "I want a size I can manage myself or with a few key employees") was significantly explained by the motives of financial success (positively) and independence (negatively); and risk-return preference was significantly explained by financial success (positively) and recognition (negatively).

In regression analysis – constrained to a subset of nascent entrepreneurs who reported in future studies to have an operating business(i.e., actual entrepreneurs) – Cassar (2007) found that especially financial success(i.e., a purely economic motive) relates to the intention of nascent entrepreneurs to increase both the level of sales and the level of employment (see Figure 5.3). Also the entrepreneur's motives in terms of independence and recognition were found to be related to growth intention – i.e., through negative effects on employment growth intention only. The negative effect for independence is interesting: apparently, independence is an important motive to start the venture creation process (as Cassar demonstrates), but at the same time it explains why entrepreneurs do not want to grow their firms.

Other motives, particularly self-realization, roles and innovation, did not significantly explain growth intentions. Note that the absence of an effect for self-realization seems to be at odds with the abovementioned finding of Davidsson (1989)

concerning the positive effect from need for achievement. Kolvereid (1992) also related start-up motivations to the growth intention of actual entrepreneurs. In bivariate analyses, many motivations (independence, status, taxes, roles, and opportunity) do not seem to be strongly related to growth aspirations. Only need for achievement and welfare were associated with growth aspirations. The finding for need for achievement does provide additional support for the findings of Davidsson (1989)[45].

Related to an entrepreneur's motives to start a new business is the issue of her or his origin of business ownership. Mochrie et al. (2006) argue that entrepreneurs who inherited a business might have lower growth intentions than entrepreneurs who started a firm themselves or who bought a firm themselves. Entrepreneurs may also work on multiple firms at the same time. Entrepreneurs who have recently started another firm might have lower ambition for the (older) firm that is the subject of the data collection effort, such as in panel survey (Davidsson, 1991). Like Cassar (2006; 2007), Liao and Welsh (2003) also used PSED data to explain growth intention. Liao and Welsch focused on the expected revenues in the first and the fifth year of operation. Whereas Cassar (2006) mainly focused on human capital, Liao and Welsh present a more comprehensive model that also included financial capital and social capital (which itself was composed of structural capital, cognitive capital, and relational capital; Nahapiet & Ghoshal, 1998). In addition, their empirical test distinguishes between the growth intentions of technology-based nascent entrepreneurs and non-tech nascent entrepreneurs. In line with social capital reasoning, all three dimensions of social capital were positively related to growth intention (paths between these three explanatory dimensions are not reported here). Furthermore, financial capital appeared to play an important role,

[45] This confirms the earlier made distinction in two types of achievement: role residing and as to performance – i.e., entrepreneurial intentions and ambitious entrepreneurship.

unlike human capital (see the right-hand side of Figure 5.3). This is a surprising result given the abovementioned finding (Cassar, 2006) that human capital does relate to growth intentions. However, it appears that the measure for financial capital as used by Liao and Welsch (2003) includes household income, which Cassar (2006) used to operationalize human capital. Furthermore, mediated relationships might well exist between human capital and the dimensions of social capital as put forward by Liao and Welsch (2003).

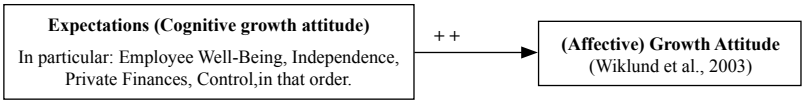
In sum, growth willingness/intention appears to depend on a wide, complex and multi-level array of factors. These factors include personal, social, organizational and contextual elements. Furthermore, they might have non-linear and interaction effects. Regarding the latter, for instance, Dutta and Thornhill (2008) propose that the entrepreneur's cognitive style might reinforce the negative effect that competitive hostility might have on growth intention. More specifically, they propose that entrepreneurs with a holistic approach (i.e., entrepreneurs with a strong focus on improvisation, intuition, and divergent goals) tend to display particularly strong reductions in their growth intention as a result of (perceived) increases in competitive hostility. This effect is suggested to be less pronounced for analytic entrepreneurs (i.e., entrepreneurs with a strong focus on planning, rules, and incremental goals).

Antecedents of growth attitude

To explain affective growth attitude (measured as the respondent's attitude towards an hypothetical 100 per cent increase in number of employees; see Figure 5.1), Wiklund et al. (2003) focused on the eight beliefs about the expected (positive or negative) consequences of growth (i.e., cognitive growth attitude in Figure

5.1). Although the regression coefficients are generally not very strong, the applied replication research design in the form of analyzing identical models across samples, industries, size classes, and age groups (average Adjusted R^2 = 0.25) makes it possible to conclude with considerable confidence that especially employee well-being, independence, personal income, control, and survival of crises (in that order) are important determinants (see Figure 5.4). At the same time, the expected consequences of growth in terms of workload, work tasks and quality do not substantially influence growth attitude.

Figure 5.4: Determinants of growth attitude



+ + : at least 10 replications (out of 17), with maximum coefficients between .15 and .29.

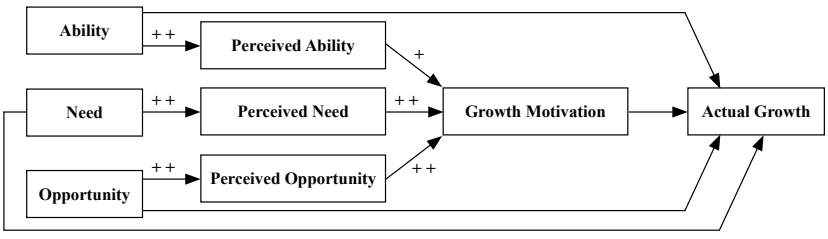
This is roughly in line with the abovementioned findings of Davidsson (1989) for the explanation of growth willingness. However, Wiklund et al. (2003) report that non-economic concerns outweigh the expected consequences in terms of private economic gains or losses. Reflecting the meaning of the Swedish original, this suggests that entrepreneurs care about the work atmosphere of the small firm in general. Rather than social desirability, Wiklund et al. (2003) suggest that a sound interpretation of this finding reflects the manager's concern for "soft qualities" associated with a small firm size.

Antecedents of growth motivation

As explained above, Davidsson (1989) considered (cognitive) growth expectations as determinants of growth willingness. However, in a broader and more comprehensive study, Davidsson (1991) focused on growth willingness (now labelled growth aspirations) and growth expectations (now coined cognitive growth attitude) as first-order indicators of growth motivation (see Figure 5.1). Affective growth attitude involves the third first-order indicator.

Figure 5.5 displays the conceptual model from Davidsson (1991). In this model, the firm's actual growth is determined by the respondent's objective ability, need and opportunities for realizing growth.

Figure 5.5: Antecedents of growth motivation



Source: Davidsson (1991)
+ + : coefficients range from .22 to .34.
+ : coefficient is .07.

In addition, the model captures how these objective indicators translate into the respondent's *perception* of her or his ability to generate growth (e.g., internal locus of control and self-confidence), her or his *perceived* need for growth (e.g., *n* Ach and economic satisfaction), and her or his *perception* of opportunities for growth (e.g., external obstacles, entry barriers, and room for growth), and how these ele-

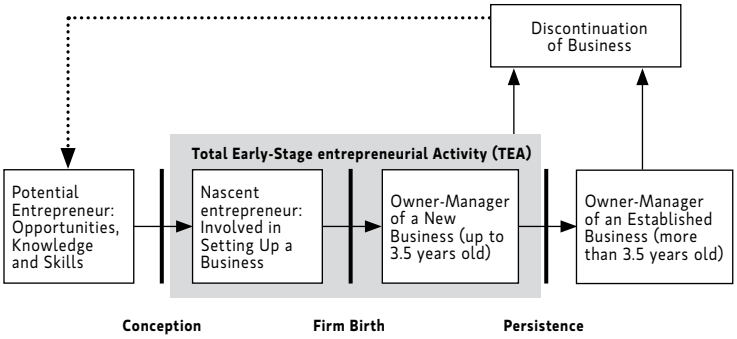
ments have an influence on actual growth mediated by the respondent's growth motivation.

Empirically, using Partial Least Squares, as much as 33 per cent of the variation in growth motivation was explained (this model fit includes a strong, direct effect from objective need on motivation). Furthermore, the perception variables appear to clearly mediate the effects from the objective variables. The effect of perceived ability was positive but small, while perceived opportunity and especially perceived need suggest strong effects on growth motivation.

5.3 ANTECEDENTS OF GROWTH EXPECTATION: EVIDENCE FROM GEM STUDIES

This section reviews the results of empirical studies that have sought to explain 'high-growth expectation' entrepreneurship, as one of the ambitious types of entrepreneurship that are discerned using Global Entrepreneurship Monitor (GEM) data. Figure 5.6 summarizes the main phase of entrepreneurship which are distinguished in the GEM, while box 5.1 provides a brief overview of the GEM methodology and the definitions of some main indicators (see later).

Figure 5.6: Phases of entrepreneurship in the GEM research framework



There tends to be an overlap between the three main types of ambitious entrepreneurship GEM distinguishes, but there are also entrepreneurs who, for instance, do not aim for growth even though they claim to offer a new product or service. Across 127 European regions, Bosma (2009) reports a correlation coefficient between the first two indicators of 0.61. This implies that also at the regional level there may be a different 'portfolio' of several types of ambitious entrepreneurial activity. At the national level, correlations between several types of ambitious entrepreneurship appear to be higher (Hessels et al. 2008), which may support a call for appreciating regional-level determinants of ambitious entrepreneurial activity. Regions matter as a natural environment for entrepreneurship (Bosma et al., 2011b; Feldman, 2001; Sternberg, 2009) because: (i) they differ substantially in the degree of potential entrepreneurs (compositional effect); (ii) social and professional networks (still) have high regional 'imprints'; (iii) there is a high degree of regional industry localization; (iv) urban areas have specific advantages for entrepreneurship; and (v) there appear to be significant

and persistent differences in regional cultures that are relevant to entrepreneurship.

Micro-level determinants of growth-expectation entrepreneurship

Micro-level determinants are predominantly in line with each other: growth-oriented entrepreneurs tend to be relatively young, male, highly educated and rather wealthy in terms of household income (Autio & Acs, 2010; Bosma, 2009; Terjesen & Szerb, 2008). Terjesen and Szerb (2008), in their study encompassing 35 countries, find education to be particularly spurring growth aspirations of nascent entrepreneurs, while household income is linked with growth aspirations of established entrepreneurs. They also relate opportunity-driven motives to growth aspirations. Furthermore, they find that, in general, aspirations for growth go together with aspirations in terms of innovation (potentially confirming the in Chapter 4 proposed relation between the need for innovation and ambitious entrepreneurship), exports, outside investment and the estimated size of the start-up capital required for starting the firm. Not surprisingly, also positive perceptions to entrepreneurship are linked with aspirations in terms of job-growth expectations. Levie and Autio (2008) argue that mediating effects are likely to exist: they show in an analysis at the macro level that countries with favorable entrepreneurship climates in higher education tend to exhibit higher perceptions of opportunities to start a business, which in turn impacts growth-oriented entrepreneurial activity positively. More GEM-based results that emphasize the (national) contextual situation can be found in Chapter 7.

The study by Verheul and Van Mil (2011) is original in that it reports findings on both growth ambition and growth expectation for Dutch entrepreneurs. Growth

ambition was measured by asking the respondent to choose between (1) "I want my firm to be as large as possible" and (2) "I want a size I can manage myself or with a few employees". Those answering the first option were categorized as entrepreneurs with growth ambitions. Growth ambition and growth expectation are highly correlated, but there are entrepreneurs with high ambitions paired with low expectations and vice versa. For the Netherlands, Verheul and Van Mil (2011) find the (young) age of nascent entrepreneurs, the time investments in the firm by the nascent entrepreneurs and the international orientation of both nascent entrepreneurs and owner-managers in new firms to be significantly correlated with growth ambition. Acknowledging the impact of international orientation mitigates the gender effect for owner-managers in new firms.

Box 5.1: GEM methodology

GEM takes a comprehensive socio-economic approach to studying entrepreneurship, considering the degree of involvement in entrepreneurial activity within a country, and identifying different *types* and *phases* of entrepreneurship[46] Thus, GEM generates original data on the institutional framework for entrepreneurship and entrepreneurial attitudes, entrepreneurial activity and entrepreneurial aspirations using its own methodology that is harmonized across countries (see Reynolds et al., 2005, for an extensive review on the methodologies and procedures adopted by GEM). The data collection takes place annually and involves completion of at least 2,000 telephone and/or face-to-face surveys (dependent on phone penetration rates) to a sample that is representative of the adult population. This makes GEM a unique dataset, worthwhile reviewing as such in reports as the current one on ambitious entrepreneurship.

The operational definitions that circulate in GEM-based publications deserve some special attention. While entrepreneurship is recognized as a multifaceted phenomenon with

[46] See, e.g., Shane (2009) for the importance of identifying differences in types and phases of entrepreneurship.

many different meanings and definitions, GEM operationalizes entrepreneurship as: "Any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business." Thus, while GEM defines entrepreneurship rather narrowly as new business activity, it takes a broad view of what it recognizes (new) business activity to be. For example, unlike many official records of new business activity, GEM's definition is not restricted to newly registered businesses[47]. GEM-based studies tend to focus on the phase that combines the stage in advance of the start of a new firm (nascent entrepreneurship) and the stage directly after the start of a new firm (owning-managing a *new* firm). Taken together, this phase is denoted as "total early-stage entrepreneurial activity" (TEA)[48]. In addition, individuals with entrepreneurial attitudes – potentially leading to entrepreneurial activity – and individuals involved as owner-managers in *established* firms are identified. Figure 5.6 shows some details of the processes individuals may go through, as conceptualized by the GEM research framework. In addition to the abovementioned phases, entrepreneurial attitudes as potential prerequisites of entrepreneurial activity are identified. Of course, also discontinuation of activities in owning and managing a business are important aspects of entrepreneurship. Most importantly for the present chapter, though, several types of entrepreneurship are captured, including this report's ambitious entrepreneurship. The following ambitious types of entrepreneurship are typically discerned using GEM data:

- Entrepreneurship with high-growth expectations
- Entrepreneurship with (self-reported) innovative characteristics
- Entrepreneurship with (self-reported) international orientation

[47] GEM thus adopts the occupational perspective of entrepreneurship, even though it looks further than individuals officially registered as self-employed. Entrepreneurship can also be seen from the behavioural perspective – for example, by identifying employees within organizations who behave entrepreneurially (also known as intrapreneurship or corporate entrepreneurship). As explained in Chapter 1, this report adopts a behavioural perspective. This is why we have included Chapter 3 on intrapreneurship. A first assessment on intrapreneurship has been conducted across 11 countries in 2008 (Bosma et al., 2010a). In 2011, details on intrapreneurship have been included in the GEM surveys for all economies participating in GEM that year.

[48] The acronym TEA originally expressed "total entrepreneurial activity". Here, the word 'total' was meant to capture the 'total' collection of new firm activities, including agriculture. This led to some confusion (see, e.g., Hindle, 2006) as the suggestion was made that, for instance, also entrepreneurial activities in established firms were captured in the measure. Hence, the words 'early-stage' are usually included in describing the TEA acronym, which has been retained as the measure itself has not been altered since 2001.

Taken together, they form one of the dynamic components of entrepreneurship – next to the components of entrepreneurial attitudes and entrepreneurial activity (see Bosma & Levie, 2010). In recent years, GEM data has been used in several academic papers that focus on determinants of several ambitious types of entrepreneurship – most of them in a multi-country study, thus appreciating some characteristics of the national context.

5.4 CONCLUSION

In sum, growth ambition is a multidimensional concept that includes elements of intention, affective attitudes, and beliefs. Of these, especially intention (or willingness/aspirations) to grow has received attention in the literature. Our review shows that growth intention appears to depend on a wide, complex and multi-level array of factors. These factors include personal, organizational and contextual elements. At the personal level, human capital and gender play a role, but also factors such as need for achievement, beliefs about growth consequences, and start-up motives. Both intrinsic and extrinsic factors impact the intention to grow. At the same time, research shows the importance of drivers that are non-financial in nature, such as employee well-being, control and independence. Furthermore, these findings for control and independence illustrate the complexity and the non-linearity of effects. On the one hand, a desire for independence, as an important reason for becoming an entrepreneur in the first place, might hamper growth aspirations out of fear to lose control over the organization. On the other hand, the intention to grow might be strong as a result of the desire to become less dependent on external actors, such as banks, suppliers and clients. Larger firms, for instance, typically have a stronger bargaining power relative to outside partners.
For nascent entrepreneurs, it was shown that various dimensions of their social

capital impact their willingness to grow. Finally, organizational and contextual determinants of growth intentions were found, including, for instance, firm size and industry/technological context. Adding to complexity, findings also appear to depend on the precise nature of growth intentions – e.g., whether they refer to sales or employment aspirations.

Research showed convincingly that affective growth attitude is related to cognitive growth attitudes – i.e., to beliefs about growth consequences. Furthermore, in a comprehensive study that collapsed growth intention, affective growth attitude, and cognitive growth attitude in an overall growth motivation variable, it was reported that personal, organizational and contextual determinants can be grouped into three determinants related to the (perceived) ability, need and opportunity to grow. Furthermore, all three determinants were shown to be strongly related to growth motivation.

Our review of the literature has revealed some limitations of this field of study. For instance, most empirical results come from two data sources: i.e., a Swedish and an American dataset (PSED). Although both datasets are the result of high-quality data collection procedures, opportunities exist to test relationships in other parts of the empirical domain.

An advantage from the GEM methodology is the possibility to combine micro and macro-level data. The evidence from such multi-level studies so far indicates that individual-level characteristics are paramount for explaining the probability of being involved in ambitious entrepreneurship. However, what has so far remained largely unexplored, is the effect of cross-level interactions: what type of individual determinants matter especially in what type of macro environments. Autio and Acs (2010) provided indications that such relationships may be particularly

relevant. Because of the design of the GEM study as one that aims to compare countries in their differences on entrepreneurial activity, national-level determinants are overrepresented in the list of GEM-based studies into the determinants of ambitious entrepreneurship.

Furthermore, besides place, also time might play an important role. In particular, the Swedish dataset is dated. Another limitation involves the lack of replication studies. Very few conceptual models were tested in multiple populations. Finally, the lack of conceptual and operational consistency makes accumulation of evidence and insight problematic. Overall, this hampers our confidence in the generic validity of the findings reported here. Finally, one has to bear in mind that this report outlined determinants of the *intention* to grow. Having an ambition to grow, of course, is not sufficient for realizing growth. This ambition-realization relationship is the subject of Chapter 6.

CHAPTER 6

GROWTH REALIZATION

Most firm founders have no ambition to grow their firm, and a large part of the founders that have this ambition do not realize to grow their firm. In the end, only a minority of the new firms develops into substantial firms, and just a tiny fraction of those create new industries in a process of creative destruction. In this chapter, we discuss the empirical evidence on the determinants of realized employment growth in new firms[49]. For this review, we have selected empirical studies on new or relatively young firms in multiple industries, thus excluding studies that include mature (small) firms (Davidsson, 1991; Wiklund et al., 2009) and single industry studies (e.g., Khaire, 2010; Stam, 2009)[50]. We review first the cross-section studies on this issue, before subsequently discussing the limited longitudinal research that has been published to date.

[49] We have chosen employment growth as the empirical indicator of growth for our review because this indicator is most important for economic policy, and because it provides the best comparative benchmark in the context of international studies. Profits are more sensitive to national (tax) regimes, and turnover data is both more volatile and less necessary in the early phases of the firm's life course (some firms are able to grow with venture capital, and hardly any sales). Findings on determinants of employment growth should not be seen as equivalent to findings on sales growth or profit growth: empirical studies have shown that these growth indicators are far from perfectly correlated (Coad, 2009; Shepherd & Wiklund, 2009).

[50] Single industry studies are excluded because these are perceived to be too sensitive to (uncontrolled) industry conditions.

6.1 CROSS-SECTION STUDIES

Dependent variables

Numerous empirical studies have analyzed the factors associated with employment growth in new firms. A selection of these is summarized in Table 6.1. The dependent variable has been measured in different ways in these studies: ranging from growth rates to absolute growth, to categorical variables such as growth / non-growth and failure / marginal survival / high performance. Table 6.1 shows the types of dependent variables used in the reviewed studies on new firm growth.

Explanatory variables

Which determinants of new firm employment growth have been found to be relevant in the empirical studies we reviewed? We have categorized the variables that have been tested in the empirical studies into seven sets: socio-demographics (age, gender, ethnicity/race, et cetera), founder motivation, human capital, social capital, financial capital, organizational capital, and business environment. There is evidence for positive effects of all these categories on the employment growth of new firms. Table 6.2 includes all variables that have been found to affect new firm growth in at least two studies. This does not mean there is consensus about the factors that drive venture growth: Table 6.2 proves that the outcomes of these studies are unevenly distributed. Few studies take a similar set of factors into account; and in the rare case this is done, contrasting outcomes are sometimes found.

Table 6.1: Cross-section studies on new firm employment growth

Authors	Time period	Dependent variable	Industries	Number of firms	Region
Cooper et al. (1994)	1985-1987 (3 years)	Failure / marginal survival / high-performance	Representative for new firm population	1,053	US
Brüderl & Preisendörfer (1998)	1985/86-1990 (4 years)	Growth / non-growth	All except crafts, agriculture, physicians, architects, and lawyers	1,710	Münich and Upper Bavaria (Germany)
Vivarelli & Audretsch (1998)	1985-1993 (<9 years; mean age 3 years)	Growth rate	All	100	Emilia (Italy)
Almus & Nerlinger (1999)	1992/1996-1998	Growth rate	Manufacturing industries (both 'High-Tech Industries' [R&D-intensity above 3.5%] and 'Non-High-Tech Industries' [R&D-intensity below 3.5%]).	8,739	Germany
Dahlqvist et al. (2000)	1994-1997 (3 years)	Failure / marginal survival / high-performance	All except agriculture, forestry, hunting, fishery, and real estate	6,377	Sweden
Schutjens & Wever (2000)	1994-1997 (3 years)	Growth rate	All except agriculture and mining	563	Netherlands
Bosma et al. (2004)	1994-1997 (3 years)	Absolute growth	All except agriculture and mining	758	Netherlands

Authors	Time period	Dependent variable	Industries	Number of firms	Region
Colombo & Grilli (2005)	1980 (or later) - 2004 (max. 13 years)	Number of employees	High tech sectors (manufacturing and services)	506	Italy
Chrisman et al. (2005)	1992/1997-2001 (3-8 years)	Number of employees	All (received outsider assistance at start)	159	Pennsylvania (US)
Hmieleski & Baron (2009)	(2 years; mean age 6 years)	Growth rate	Random sample from Dun & Bradstreet	207	US
Stam & Wennberg (2009)	1994-2000 (6 years)	Growth rate (growth / non-growth)	All except agriculture and mining	647	Netherlands
Bonaccorsi & Giannangeli (2010)	1999 / 2000-2001 - 2002 (2 years)	Growth / non-growth	Stratified (by region and sector) random sample	3,354	Italy

Table 6.2: Determinants of new firm (employment) growth

	Variables associated with new firm growth	Cooper et al. (1994)	Brüderl & Preisen-dorfer (1998)	Vivarelli & Audretsch (1998)	Almus & Nerlinger (1999)
Socio-Demographics	Age entrepreneur				
	Male founder	+	+		
	Immigrant	-	0		
Human capital	Education level	+	0		
	Self-employed parents	0		0	
	Management experience	0	0	+	
	Unemployment			0	
	Self-employment/entrepreneurial experience		0		
	(Long) work experience		-		
	Industry experience		0		
	Technical experience				+
Social capital	Entrepreneurial networks		0		
	Emotional support from spouse		0		
	Business partners	+	0		0
Founder Motivation	Market need/niche			0	
	Realize idea/innovation			+	
	Achieve employment growth				
	Achieve higher income / profit			+	
Financial capital	Start-up capital	+	+		
Organizational Capital	Incorporation		+		+
	Firm size (employees)		0		-
	Started as take-over		-		
Environment	Industry: retail/personal services	-	0		
	Industry: manufacturing/construction		0	+	
	Industry: high-tech manufacturing				+
	Industry: business services		0	0	
	Industry dynamism				
	Metropolitan/urban location				0

Dahlqvist et al. (2000)	Schutjens & Wever (2000)	Bosma et al. (2004)	Colombo & Grilli 2005	Chrisman et al.2005	Hmieleski & Baron 2009	Stam & Wennberg 2009	Bonaccorsi & Giannangeli 2010
	0	0	+	0	0	-	+
+		+			0	0	
-							
	0	0	+	0	0	0	0
							0
	0		0			+	0
0							
+		0	+	+	0/+	0	0
	-	+					
	0	+	+			+	0
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	0		+			0	+
+	0						
	+				0	0	+
	0						
-	0			0		0	
	+			+/0		+/0	+
						0	
	+	0		0		+/0	0
					0/+	-	
0/+	0						

Socio-demographics

According to some empirical studies, being a female founder[51] or belonging to an immigrant group has a negative association with firm growth. The age of the founder has been found to effect new firm growth both in a positive and a negative way, with many studies finding no statistically significant effect.

Human capital

There are multiple studies that have examined the relation between human capital and entrepreneurial success, both also measured in multiple ways. Basically, human capital (a) is expected to increase owners' abilities of discovering and exploiting business opportunities, (b) is said to help owners to acquire resources such as financial and organizational capital, and (c) might assist in the accumulation of new knowledge and skills. In a recent meta-analytical review, Unger et al. (2011) found a significant but small relationship between human capital and success (measured as either profit, sales or employment growth, or firm size in sales volume or employees)[52]. The relationship was higher for outcomes of human capital investments (knowledge/skills) than for human capital investments (education/experience), for human capital with high task-relatedness compared to low task-relatedness, for young businesses compared to old businesses, and for the dependent variable size compared to growth or profitability. Our review shows that there is quite some consensus – or at least no contradicting evidence – about the effects of human capital. The human capital variables, including the founder's educational level, ma-

[51] Human capital and gender are often related, however. Rosenbusch et al. (2011) found that gender gaps in human capital differ depending on the national culture, with more gender differences in Western Germany than in China, and a (positive) moderating gender effect in Germany on the effect of managerial experience and industry experience on entrepreneurial success.

[52] Van der Sluis et al. (2008) found in their meta study on education and entrepreneurship that years of schooling does not have an effect on the decision to become self-employed, but does have a positive effect on the success of entrepreneurs (in terms of income, firm survival, firm growth, and profits). Other studies (Hartog et al. 2010; Parker and Van Praag 2006; Van Praag et al. 2009) have shown that the returns to education are significantly higher for entrepreneurs than for employees.

nagement experience, entrepreneurial experience, industry experience and technical experience, have generally been found to have a positive impact on growth. There is no contradicting evidence showing negative effects of human capital, but there are (surprisingly) many studies that do not find a statistically significant effect. There is controversy on the relationship between work experience and new firm growth, though. Work experience might provide opportunities for on the job-learning, leading to valuable knowledge for managing a growing business. However, this depends on type of activity and type of organization in which experience has been gained. Entrepreneurs with lengthy work experience could become more cautious and conservative than entrepreneurs with shorter work experience. Recent studies also revealed that founders' pre-entry history does influence venture size (Bonaccorsi & Giannangeli, 2010; Klepper, 2007), but not directly growth.

Social capital

Social capital can improve access to information on potential business opportunities, and might help to attract financial and human resources. In addition, emotional support – for instance, by the spouse of the entrepreneur – may also be of relevance, especially in the highly uncertain start-up phase of the venture. While the reviewed empirical studies did not establish a positive relationship with firm growth directly, Bosma et al. (2004) showed that emotional support of the spouse was positively linked with survival and profitability of the firm in the first few years after the start-up. Starting a new venture with a team instead of just solo provides access to many more informational and other resources. Additionally, more weak ties with other professionals and potential resource providers outside the firm gives indirect access to resources that are especially needed to develop a growing

new venture. These networks not only affect new venture growth directly; they may also indirectly affect access to resources and improve sales by providing legitimacy to the newly established venture. In a recent meta-analysis, Westlund and Adam (2010) concluded that strong evidence points at the positive impact of social capital on firm performance in general. Our review reveals positive effects of social capital both in the professional and in the personal sphere: starting a firm with business partners has a consistent positive relationship with subsequent firm growth, while having the emotional support of the 'significant other' particularly helps surviving the difficult early-stage phase of the firm.

Founder motivation

There have been many studies on the role of founder motivations in the start-up process, but less on the effect of founder motivation on the post-entry performance of firms. However, especially in the early life course of firms in general and small firms in particular, the founder's motives are likely to be an important determinant of the growth of the firm. Firm growth is likely to be a means to another end – for example, realizing the development of a particular product or the provision of goods or services for a particular market. Perhaps, it is not the positive effect of growth motivations that is most important here, but a negative effect, reflected in the situation that founders are explicitly *not* willing to grow the venture. Based on the data used in Stam and Wennberg (2009), Table 6.3 shows the relationship between employment growth ambitions and subsequent realized growth.

Table 6.3: Employment growth ambitions: stated and realized (N = 645)

		Not realized growth T2	Realized growth T2	Total
Employment growth ambitions T0	Not	348	6	354
	Possibly	190	29	219
	Certainly	49	23	72
	Total	587	58	645

Source: EIM start-up panel.

The table first shows that the majority (54 %) of new firm founders have no ambition to grow their business, and indeed also do not grow their business. Out of the group of entrepreneurs that started with a growth ambition, 82 % does not realize this over the subsequent two year period. In the group of firms that realize to grow, only a small percentage (10 %) had no ambition to grow initially. Having growth intentions at start is close to a necessary, but certainly not a sufficient condition for subsequent realized growth.

Financial capital

One of the most important resources to enable the growth of a – often liquidity constrained – new venture is financial capital. Almost by necessity, a new firm is not able to reinvest its retained earnings, as its key activity is exactly to generate resources by developing a new good or service. Depending on the initial scale of production needed to survive and grow in a particular market, high levels of external financial capital are required to reach this scale of production (e.g., with investments in R&D, human resources and marketing). Half of the studies revie-

wed included start-up capital as one of the determinants for growth. Two thirds of them reveal a positive association between the level of start-up capital and subsequent firm growth. Of course, some reasons why start-up capital has been raised (such as, for instance, relevant types of human and social capital involved with the new venture that could not be included in the analysis) may prove to be the crucial indicators of success, not the fact in itself that start-up capital is present. However, most studies controlled for levels of human and social capital in their tests of the effect of start-up capital levels on new firm growth.

Organizational capital

For new firms, a major issue is to build a well-functioning organization that is able to deliver goods and services at a lower price than its competitors, or with a higher value provided to customers. In order to realize this, organizational capital has to be developed – for example, with the build-up of organizational routines that enable efficient production, and with a legal structure that signals reliability to external parties. Being legally incorporated reveals to have a positive effect on growth in several studies[53], while surprisingly a start with a take-over of an existing firm (i.e., with relatively many resources and routines in place) does not positively affect growth.

Initial firm size

A "classic" topic is the firm size – growth relationship, with Gibrat's law as the oft-studied benchmark hypothesis (e.g., Parker et al., 2010; Sutton, 1997). There is controversy on the relationship between the initial (employment) size of the firm and subsequent firm growth. On the one hand, the industrial economics lite-

[53] However, Harhoff et al. (1998) also show that incorporated firms are more likely to go bankrupt than non-incorporated firms, indicating that incorporation is associated with high risk-high gain strategies.

rature argues that young and small firms grow relatively fast, because they have to achieve the minimum efficient size (MES) in their industry (Audretsch et al., 2004; Mansfield, 1962). Initial size has been found to have a negative association with firm growth in these studies (Audretsch et al., 1999; Lotti et al., 2001). Smaller ventures have a higher need to grow (Davidsson, 1991). On the other hand, relatively large ventures have more resources at hand to realize growth and are more likely to attract financial capital and human resources, which enables them to grow more rapidly than small ventures (see Westhead & Cowling, 1995). These large ventures may also be more ambitious regarding future growth. This effect can be traced by controlling for growth ambitions. Recent evidence on the growth of ventures shows that the relationship between venture size and growth is non-linear, implying that firms which were born smaller than a particular threshold size grow significantly less, while ventures with a size above this threshold are more likely to grow (Bonaccorsi & Giannangeli, 2010).

Business environment

That the business environment, more particularly the industry and location of the (new) firm, affect a firm's possibilities for growth are key assumptions in the industrial economics tradition (Audretsch & Mahmood, 1994) and the economic geography literature (Stam, 2005). However, our review shows that these assumptions are far from empirical reality, in that there is a lack of robust findings on the effects of industry and location on new firm growth. An exception might be the effect of the industry-specific minimum efficient size: different industries are characterized by different scale requirements (e.g., the MES in manufacturing industries is likely to be higher than in service industries). It is questionable

whether in an industrial context that is characterized by networked production and consumption, the firm is the most relevant unit for production in the first place (Teece, 1992). The role of industrial networks has been central in the recent literature on industrial clusters (see Chapter 7), and in the literature on network effects or network externalities that emphasizes the importance of being the first to set the dominant network standard in the industry (cf. the standard for mobile phone communication, or for a software platform). This also relates to the industry life cycle literature that has shown that during the emergence of a new industry there many opportunities for new entrants, while these opportunities are much more limited once a dominant product design has been set in the industry. The firm that is able to set this standard and appropriate the returns from this is likely to become the industry leader. After the dominant design has been set, the minimum efficient size is likely to go up enormously, and process innovations are more likely to pay off then product innovations (Klepper, 1997). We are not aware of any empirical evidence on how this affects ambitious entrepreneurship and realized new firm growth.

6.2 LONGITUDINAL NEW FIRM GROWTH STUDIES

The review of the studies on the determinants of new firm growth revealed which factors are associated with new firm growth. Most of these studies have, however, not tested for the more complex and causal structure of and among the determinants, ignoring the mediating, moderating, non-linear and feedback effects that may be involved[54]. Take, for example, the roles of innovation and growth intentions. A recent study by Stenholm (2011) on SME growth confirms the positive effect of innovative behaviour on firm growth, but shows that innovative behaviour

[54] Even though growth intentions are nearly a prerequisite for firm growth, the realization of growth necessitates many other actors and resources to be in place.

(especially the market introduction of new products) negatively moderates the effect of growth intentions on subsequent firm growth. Growth intentions without radical innovations are more likely to lead to growth in the short term than growth cum innovation. But clearly, there is a paucity of comparable longitudinal studies on the causal factors and contingencies involved (at multiple levels) in new firm growth (Parker et al., 2010; Stam, 2010). In this section, we briefly summarize the key finding from this (too) small literature.

A few studies have shown the moderating effects of market constraints, entrepreneurial skills and organizational resources in models of small firm growth (Penrose, 1959; Wiklund & Shepherd, 2003). The study by Wiklund and Shepherd (2003) confirmed that small business managers' growth intentions are positively related to subsequent growth, but also revealed that this relation appears to be more complex: education and experience of the small business manager, as well as environmental dynamism, magnify the effect that one's growth intentions have on the realization of growth – i.e., these factors positively moderate the effect of growth intentions on subsequent growth. They interpret this in terms of the theory of planned behaviour (see Chapter 2): behavioural control (resources and opportunities) positively moderates the effect of growth intentions on realized growth. Other studies showed that most new firms that are able to grow are very likely to face growth constraints and subsequent bottlenecks, and that only a limited set of these firms are able to learn from these problems to subsequently improve and develop organizational capabilities (Garnsey, 1998; Hugo & Garnsey, 2005; Parker et al., 2010).

6.3 CONCLUSION

One might argue that the most important transition in the study of ambitious entrepreneurship is the realization of value by the entrepreneur beyond self-sufficiency. One of the empirical measures of such value creation is the employment growth of new firms, suggesting that the employment generated is due to new activities to realize the creation of new value. Our review of studies shows that the initial conditions with respect to human capital, financial capital, social capital and organizational capital often matter for subsequent growth. However, much ambiguity remains as to the consistency and sometimes even direction of the effects. The relatively small subset of studies that also took into account the (ex ante) growth intentions of the founders, report this to be of relevance, even when the other determinants of growth are controlled for. Having growth intentions at start is close to a necessary, but certainly not a sufficient condition for subsequent realized growth. The limited research available on the effect of founder motivations with respect to innovation and growth also reveals interesting moderating effects: for example, a negative moderating effect of innovation on the relation between growth intentions and realised growth, and a positive moderating effect of human capital on the relation between growth intentions and realised growth.

CHAPTER 7

CONTEXTS OF ENTREPRENEURSHIP

The literature reviewed in the prior chapters has a rather universalistic flavour. However, there is a huge variety in entrepreneurship levels across countries, regions and over time, even when relevant individual characteristics are controlled for. In this chapter, we will focus on the role of the context of ambitious entrepreneurship, in particular adopting an institutional lens. Institutions include any form of constraint or enabler that human beings devise to shape human interaction (see, e.g., North, 1990: 4); they constrain as well enable behaviour (Nooteboom, 2000), and are argued to be the fundamental cause of long-run economic growth (Acemoglu et al., 2004).

The institutional environment contains the set of political, economic, social and legal conventions that establish the foundational basis for production and exchange (Oxley, 1999). Institutions can be formal (laws, regulations, policies and other codified procedures) as well as informal (e.g., culture, norms, values, belief systems, practices, and customs). They may be created (like regulations are designed and enforced by national governments) or they may emerge and evolve over time (like culture). Institutions provide a context for entrepreneurship. They enable production and exchange by entrepreneurs, they provide incentives for particular entrepreneurial behaviour over other behaviour, and they shape individual preferences. Institutions are seen to be founded on three pillars: regulative, normative and cultural-cognitive (Scott, 2001). These elements form a continuum moving from the conscious to the unconscious, and from the legally enforced to the taken for granted. Before we focus on the role of institutions, we first deal with the role of the macro-economic and meso-economic (industries and clusters) context.

7.1 MACRO-ECONOMIC CONTEXT

Economic development in general affects both entrepreneurial role-residing and performance achievement ambitions. As an economy develops, the level of necessity-driven entrepreneurial activity gradually declines. At the same time, more productive sectors grow and supply more employment opportunities (Bosma et al., 2009). Opportunity-driven and ambitious types of entrepreneurial activity tend to pick up, introducing a qualitative change in overall entrepreneurial activity (Wennekers et al., 2010). Audretsch and Thurik (2000; 2010) discuss the transition of the managed economy into the entrepreneurial economy, and identify the main drivers behind this transition. Many of these drivers, such as an increase in individualism, the upsurge of new (ICT-related) industries and globalization, are associated with economic development. While these recent developments may have gradually shifted the balance of managerial versus entrepreneurial orientation in Western countries, the implications for emerging countries may be more radical, spurring ambitious entrepreneurship in these regions (Habiby & Coyle, 2010).

Macro-economic development also goes together with development of institutions and economic freedom. Economic freedom has been connected to entrepreneurship (Kreft & Sobel, 2005; McMullen et al., 2008). It should be noted that economic freedom probably has stronger associations with *overall* entrepreneurship than with *ambitious* entrepreneurship, as the underlying theoretical construct is more related to occupational choice and in particular the influence of "need for independence" on the occupational choice decision (rather than "need for achievement").

National GDP per capita is positively linked to growth-oriented entrepreneurial

activity in the rich multi-level study by Autio and Acs (2010), even though the slope tends to decrease when GDP increases. They also find that *change* in GDP per capita is positively related to entrepreneurial activity with growth aspirations – a result that is confirmed in a different (cross-country panel) empirical setup in Levie and Autio (2011). At the same time, the degree to which established entrepreneurs are prevalent in the economy has a negative effect. Taken together, this reflects a dynamic, growing economy – and hence the presence of opportunities – to be conducive to ambitious entrepreneurship in terms of growth aspirations. However, it should be noted that the abovementioned studies did not fully take cultural conditions (see Section 7.4) into account. In Stephan and Uhlaner (2010), for instance, the level of national wealth (in terms of GDP) is not associated with innovative types of entrepreneurship – and only weakly with independent new business ownership rates. They do find some pronounced cultural effects on innovative entrepreneurship instead. Autio et al. (2011) elaborate on Stephan and Uhlaner's study by adopting a multi-level perspective. Their results still point at a positive impact of change in GDP per capita on growth expectation entrepreneurship, controlling for cultural effects. National levels of GDP are not significant in their exercises, which suggests that GDP levels (as monetary indicators of wealth) may be of less importance to explaining ambitious entrepreneurship than cultural indicators associated with affluence.

7.2 CLUSTER CONTEXT

Combining the industry (see Chapter 6) and geographic perspective, clusters are a relevant context to ambitious entrepreneurship. A generally accepted cluster theory does not exist due to numerous different interpretations of a cluster by different scholars (Martin & Sunley, 2003). Commonly, scholars refer to a group of similar or related firms within a geographical area that compete in the same or related industries, which are linked in vertical (buyer-supplier) or horizontal (alliances, networking, resource sharing, et cetera) ways. It should be stressed that while firms operating in a cluster may exhibit geographical proximity, they are not necessarily connected to each other to the same extent and in the same manner.

As an example of how clusters with ambitious entrepreneurs can be characterized, Sternberg (2010) operationalizes regional-sectoral knowledge-intensive clusters as a group of industries characterized by (i) above-average share of R&D inputs and outputs and (ii) by a significant degree of both spatial concentration and intra-regional cooperation. This means that so-called *high-tech regions* may be the location of *several* knowledge-intensive clusters. Analyzing the link between ambitious entrepreneurship and clusters then requires combining cluster perspectives with entrepreneurship and an appreciation of the multi-level framework (interaction of individuals and regional contexts) that emerges from this combination. Important to bear in mind is that the focus in this report lies more with individuals, whereas the literature on clusters predominantly takes the firm level – within the regional context - as point of departure.

Some meta-studies on cluster emergence and development have provided valuable insights for ambitious entrepreneurship. Bresnahan et al. (2001) found the

determinants of emergence of a cluster to be different from the determinants of cluster growth. They concluded that entrepreneurship is particularly important in the early stage of the cluster formation process, while openness of cluster relations and active search for external markets was found to be key for the success of clusters. Brenner and Mühlig (2007) provide a thorough meta-analysis on the factors that determine the *emergence* of clusters. They identify three key factors: prerequisites, triggering events and self-augmenting processes. These three key factors are represented by 35 different factors and processes. Entrepreneurship is rather implicitly dealt with in most of the cluster literature, and especially contributes to the triggering events in the classification by Brenner and Mühlig (2007). Whereas most studies on clusters analyze one or a few clusters, quantitative studies on clusters and entrepreneurship have been on the rise recently, even though still few distinguish ambitious types of entrepreneurship. Delgado et al. (2010) conclude that there is a significant (and positive) impact of clusters on new business formation and start-up employment in the United States. Empirical evidence on the effect of clusters on entrepreneurship is limited so far. Hakanson (2005) and Wennberg and Linqvist (2010) document in their reviews of empirical evidence a very mixed influence of clusters on firm performance. Wennberg and Lindqvist (2010) argue that one explanation of this variation in results may be the inconsistency in methodologies used, in particular in terms of levels of geographical and industry aggregation. They find evidence for Swedish clusters to create more jobs, higher tax payments and higher wages to employees, with their main results being robust for alternative specifications, although the size of the effect is contingent on the geographical level of agglomeration adopted. Delgado et al. (2010) find strong clusters to contribute to firm survival.

An overall conclusion on these meta-analyses with the lens on ambitious entrepreneurship is that (i) ambitious entrepreneurship is particularly important as a triggering event for new cluster development (cf. Feldman et al., 2005) and (ii) entrepreneurs benefit from being located in emerging and growing clusters related to their business activities.

7.3 INSTITUTIONAL CONTEXT

In this section, we will review the literature on the effects of formal institutions (the regulative pillar) and informal institutions (the normative and cultural-cognitive pillars) on entrepreneurship in general, and ambitious entrepreneurship in particular.

Basic formal institutions

For prosperous economic entrepreneurship, and economic life more in general, basic (formal) institutions such the rule of law, property rights (protection) and contract law are necessary conditions. On the one hand, many studies have revealed that a well-functioning basic institutional environment provides incentives to entrepreneurs in pursuing market opportunities for setting up and expanding new businesses. Perhaps most straightforward, it has been shown that high levels of corruption in a society hamper ambitious entrepreneurship (Bowen & De Clercq, 2008; Estrin et al., 2011). The negative relationship between a country's level of corruption and entrepreneurial endeavours directed toward high-growth entrepreneurship supports Baumol's (1990) thesis that unfair interventions by economic actors (e.g., bribery in the allocation of government subsidies) can create high

uncertainty, which in turn discourage entrepreneurs from exhibiting high-growth ambitions. Moreover, high levels of corruption may act to increase the perceived risk of high-growth entrepreneurial activity, since the higher returns from such endeavours (if successful) are more likely to be siphoned away (or even confiscated) by unfair practices initiated by competitors or with the support of corrupt government officials (Bowen & De Clercq, 2008: 760).

On the other hand, it is often stated that institutions – or more specifically, regulatory burden – are harmful for entrepreneurship (Desai et al., 2003; Henrekson & Stenkula, 2010; Klapper et al., 2004; Stam et al., 2010; Storey, 1994). However, there is also research that shows no effect of the (perceived) regulatory burden on nascent and young businesses at all (van Stel et al., 2007). Sometimes, institutions can make entrepreneurship even impossible (see Henrekson, 2005): the restrictions on or prohibition of entry into certain sectors of the economy, such as health care, security, and public administration are examples of this.

Not only the presence of institutions counts, also their quality, which comprises the clarity of the rules, their stability (or: lack of volatility), and the extent to which these rules are enforced. Unclear and opaque legislation, including unclearly written rules, frequent changes or exemption clauses may also hamper entrepreneurial initiatives (Acs & Amorós, 2008; Audretsch et al., 2002; De Jong & Van Witteloostuijn, 2011). Many entrepreneurs do not have the personal resources to devote their own time or to pay an employee to cope with bureaucratic red tape, and unpredictable changes and delays in the relevant legislation. This situation is even more severe for new and small firms: where large, established firms have privileged access to formal institutional support, new and small firms have not (McDermott & Mejstrik, 1992).

While it is clear that institutional deficiencies stemming from inconsistent enforcement of rules, ineffective legal frameworks (LaPorta et al., 1998) and corruption in governments (Doh et al., 2003) have been sources of instability that, in turn, impede entrepreneurship, institutional change might also act as a source of entrepreneurial opportunities. Newman (2000) argues that institutional upheaval promotes organizational transformation up to a point, but that beyond that level such uncertainty can be counterproductive, suggesting that (too) unstable institutions will constrain entrepreneurship.

In the literature on basic institutions and entrepreneurship, two approaches can be found. The first one analyzes the effect of institutions on the prevalence of entrepreneurship (most often measured as firm entry or self-employment) (e.g., Djankov et al., 2002). One example of this approach is the study of the impact of entry barriers due to regulation. Entry barriers raise the direct and indirect cost of starting a business, and therefore constrain the exploitation of new opportunities. A potential entrepreneur will only establish or expand a business if s/he judges the expected entrepreneurial profit to be high enough to compensate for the costs and uncertainty associated with the venture. Hence, increased costs introduced by governments through regulatory and procedural requirements raise the required rate of return for an entrepreneurial opportunity to be exploited. High costs deter potential entrepreneurs, but might paradoxically also lead to a larger share of high-growth start-ups (or conversely, to a low share of high-growth start-ups when the entry barriers are relatively low). High-growth start-ups may be relatively less constrained by these costs than other start-ups (see Ho & Wong, 2007). The relaxation of entry requirements in the Netherlands increased the quantity of entrepreneurs, but did not influence the quality of entrepreneurship (Bosma et al.,

1999; Bosma et al., 2008). In effect, in a relative sense, the share of high-growth start-ups has decreased (Stam & Bos, 2011).

The second approach assumes entrepreneurial inclinations to be (relatively) constant, and focuses on how institutions affect the allocation of entrepreneurial talent over productive, unproductive and destructive activities (Baumol, 1990; Sobel, 2008)[55], or its distribution over the informal and formal sector (Capelleras et al., 2008). The basic hypothesis of Baumol (1990: 893) is that, "while the supply of entrepreneurs varies among societies, the productive contribution of the society's entrepreneurial activities varies much more because of their allocation between productive activities such as innovation and largely unproductive activities such as rent seeking or organized crime. This allocation is heavily influenced by the relative payoffs society offers to such activities." This implies that policy can influence the allocation of entrepreneurship more effectively – e.g., with changing formal institutions (see Stam & Nooteboom, 2011) – than it can influence its supply (e.g., by changing national culture via the educational system). Both very weak and excessive regulation breeds corruption and stimulates unproductive entrepreneurship. Capelleras et al. (2008) show that there is a distinct difference in the business activity in the formal sector between highly regulated Spain and lightly regulated England. This difference disappears, however, if the informal sector is included in the analysis, suggesting that this is mainly due to the allocative effect of institutions.

Informal institutions / culture

There is a long tradition in studies on the effects of informal institutions – most often referred to as culture – on entrepreneurship. The key mechanism in this

[55] Coyne et al. (2010) argue, for example, that particular institutions channel entrepreneurial behavior towards unproductive activities, and might even cause a process of creative destruction with a net negative social impact.

literature is the influence of informal institutions (i.e., the normative pillar) on the preferences of individuals for entrepreneurial behaviour (see, for example, Bauernschuster et al., 2010). For example, in line with McClelland (1961), it has been argued that a society's need for achievement is positively associated with its levels of entrepreneurship[56]. However, there is no clear empirical evidence for this at the macro level (see Beugelsdijk & Smeets, 2008). There are a few empirical findings in the literature on informal institutions and entrepreneurship that stand out. Several studies have taken into account the cultural trait of uncertainty avoidance, with diverging findings: positively related to business ownership rates (Wennekers et al., 2007)[57], negatively related to entrepreneurial entry (Autio et al., 2011) and to national levels of ambitious entrepreneurship (Bowen & De Clercq, 2008), and no association with growth aspirations of entrepreneurs (Autio et al., 2011).

One would expect a negative association of uncertainty avoidance with entrepreneurial behaviour, in line with Hofstede's (2001) argument that individuals may have an increased willingness to engage in risky (e.g., growth-oriented) endeavours in countries characterized by low uncertainty avoidance. A number of scholars have shown the negative influence of risk aversion on the individual decision to become an entrepreneur (Cramer et al., 2002; Stam et al., 2010). The conventional wisdom is that individuals with lower risk aversion are more likely to become engaged in entrepreneurial activity. Both Arenius and Minniti (2005) and Ardagna and Lusardi (2008) find that fear of failure expressed by the individual – normally associated with higher risk aversion –goes together with lower probabilities of

[56] Of course, we may have an aggregation fallacy here, as the need for achievement is an individual-level motivation construct (see Chapter 4 on this) that is here translated into a society-level cultural feature.

[57] Wennekers et al. (2007) interpret this as following: a restrictive climate of large organizations in high uncertainty avoidance countries pushes individuals striving for autonomy towards self-employment. Regressions for these three years (1976, 1990 and 2004) separately show that this positive correlation is no longer found in 2004, indicating that a compensating pull of entrepreneurship in countries with low uncertainty avoidance may have gained momentum in recent years.

being involved in nascent entrepreneurial activity. In addition, Pathak et al. (2011) find a negative relation between individual and reference group fear of failure on entrepreneurial growth aspirations. Partly in line with these findings, Estrin et al. (2011) reveal a negative effect of fear of failure on ambitious entrepreneurship at the individual level, but no effect on the national level. This reveals that micro and macro mechanisms should be disentangled.

Noorderhaven et al. (2004) report that dissatisfaction at the level of societies has a positive and significant influence on self-employment levels. Both dissatisfaction with life and dissatisfaction with the way democracy works are found to be positively associated with self-employment[58]. They suggest that these measures of dissatisfaction are proxies for job dissatisfaction and, at the same time, represent other negative "displacements" known to promote self-employment. The findings indirectly point at the potential importance of push factors within the incentive structures of modern economies.

Stephan and Uhlaner (2010) perform a cross-national study testing a framework relating cultural descriptive norms (based on data from the Global Leadership and Organizational Behavior Effectiveness, or GLOBE, project) to entrepreneurship in a sample of 40 nations. They identify two higher-order dimensions of culture – socially supportive culture (SSC) and performance-based culture (PBC) – and relate them to entrepreneurship rates. Entrepreneurship in general seems to be more strongly related to a socially supportive culture than a performance-based culture (cf. the micro-level need for performance achievement construct in Chapter 1). However, a performance-based culture is positively associated with demand-side variables, such as opportunity existence and the quality of formal institutions to support entrepreneurship. In a more refined multi-level analysis of the same (GEM

[58] On the other hand, there is a large literature that shows that there is a positive effect of being self-employed on satisfaction with life / subjective well-being (Benz & Frey, 2008; Lange, 2011).

and GLOBE) datasets, Autio et al. (2011) find that societal institutional collectivism is associated *negatively* with entrepreneurial entry but *positively* with individual-level entrepreneurial growth aspirations. Further, they report that uncertainty avoidance is *negatively* associated with entrepreneurial entry but not with growth aspirations, and performance orientation is positively associated with entrepreneurial entry. They conclude that "collectivist societies tend to support risk taking and resource-mobilising acts, such as organic growth. Conversely, our analysis suggests that if societies go overboard with individualism, they may fail to create the societal risk-sharing mechanisms that would encourage entrepreneurs to 'take the plunge' and pursue organisational growth." (Autio et al., 2011).

In a similar domain, Uhlaner and Thurik (2007) analyzed the effect of post-materialism (Inglehart, 1981) on different stages of entrepreneurship, and found that post-materialism was positively associated with nascent entrepreneurship, especially in the form of new business formation. Most recently, cultural factors have been discussed under the rubric of 'social capital'. Kwon and Arenius (2010) find that national social capital – expressed in residents' levels of generalized trust and breadth of formal organization memberships – increases opportunity perception and weak tie investment.

Next to these normative dimensions of informal institutions, one can also distinguish cognitive dimensions of informal institutions (Scott, 2001). With respect to entrepreneurship, a well-known phenomenon is the shared understanding that entrepreneurship is a known legitimate occupational choice and role in society. It is a stylized fact that children of self-employed parents are more likely to become entrepreneur, partly due to this cognitive effect (see, e.g., Kim & Aldrich, 2007; and Nanda & Sorenson, 2010, for a similar peer effect on the work floor). At a more

aggregate level, such a shared understanding is triggered and catalyzed by the emergence and broadcasting of entrepreneurial role models in society. Knowing these kind of role models has been revealed to have positive effects on entrepreneurial intentions (BarNir et al., 2011) and activities (Bosma et al., 2011a; Lafuente et al., 2007).

Market-specific formal institutions

The studies on basic formal and informal institutions apply to societies and economies as a whole, while many institutions are rather specific in their application, as they are particularly designed to enhance specific markets: these markets can range from labour markets to product markets, and from markets for technology to capital markets. Markets for technology, for example, are made possible by the instalment and enforcement of a particular kind of intellectual property rights, more specifically patent laws, and the complementary professional regulations of patent attorneys, patent offices and so on. These institutions are initially set up to enhance market interactions, but due to changing circumstances and unintended effects they may also increasingly constrain particular market interactions (Boldrin & Levine, 2008). Additionally, there is now quite some evidence in the literature on the effects of labour market institutions on entrepreneurship, which will be discussed first.

Labour market institutions

Four specific types of labour market institutions have been studied quite extensively with respect to their effect on entrepreneurship: employment protection legislation, social security, labour taxation, and non-compete agreements. We brie-

fly review the evidence as to effect of labour market regulation on (ambitious) entrepreneurship.

Employment protection legislation may affect ambitious entrepreneurship in two ways. First, it will make ambitious entrepreneurs more reluctant to hire employees as it may be hard to get rid of them in bad times, which is not unlikely in a highly volatile growing business (see Garnsey et al., 2006). Second, the opportunity costs for ambitious employees may be relatively high in regimes with strong employment protection legislation: leaving their secure job for a highly insecure occupation as founder of a start-up may become less attractive in conditions of strong employment protection.

From a broader labour reallocation perspective, strong regulation of employing and laying off employees makes it difficult for entrepreneurs to adjust their workforce in correspondence with market fluctuations, and increases the risk of their projects even further (Audretsch et al., 2002: 47). As an employer learns about a worker's abilities over time, or as those abilities evolve with the accumulation of experience, the optimal assignment of the worker to various tasks is also likely to change. In a flexible labour market, this often involves worker mobility between firms, and such mobility is more likely when the initial employment relationship involves a small, often young, business.

Recent research has found that international differences in labour market regulations are more important than entry regulations for the level of nascent entrepreneurship: in countries where it is relatively easy to hire and dismiss employees, entrepreneurship tends to be more prominent, both in self-employment rates (Robson, 2003) and in nascent and young business rates (van Stel et al., 2007). Especially ambitious entrepreneurship and innovative entrepreneurship seem to

be hampered by strong employment protection legislation (Bosma et al., 2009). The particular effect of the difficulty of firing employees is more constraining for ambitious young business owners than for nascent ambitious entrepreneurs (Autio, 2011). This seems to have a persistent negative effect on growth further on in the firm life course: Teruel and de Wit (2011) found a negative association of the strength of employment protection legislation with national rates of high-growth medium-sized firms.

Hence, one can conclude that labour market regulations might constrain entrepreneurship. If wage employment is highly regulated, there may, however, be strong incentives to devise arrangements that circumvent these regulations (Henrekson & Stenkula, 2010). One way for potential entrepreneurs to circumvent restrictions induced by labour market regulation is to carry out entrepreneurial projects as a self-employed, and if labour is needed, to use only self-employed labour, instead of hiring employees. Compensation and working hours are totally unregulated, and no labour security is mandated for the self-employed. This may boost the self-employment level, but should not be interpreted as a sign of increased pursuit of entrepreneurial opportunities. This seems to have happened in the Netherlands in the 1990s and 2000s (Wennekers & Hartog, 2011).

The effect of employment protection legislation might thus be two-sided: negative for ambitious entrepreneurship and positive for self-employment. A similar dual effect can be observed for social security and taxes. On the one hand, there is a negative effect of social security in so far as generous social security for employees increases the opportunity costs of entrepreneurship[59]. On the other hand, social security may in general have a positive effect on entrepreneurial activity by creating a safety net in the case of business failure. In the domain of taxes, a

[59] See Hessels et al. (2007), Wennekers et al. (2002), and Parker & Robson (2004). Hessels et al. (2008) also found a negative effect on ambitious entrepreneurship.

similar two-sided effect operates. On the one hand, high – and especially progressive – taxes reduce the returns to entrepreneurship (Bowen & De Clercq, 2008); on the other hand, self-employment may offer greater opportunities to evade or avoid tax liabilities.

Spin-off firms are a specific type of start-ups that are founded by entrepreneurs experienced in the industry of entry. This industry experience has been found to positively affect the performance of these new firms (Klepper, 2009). It is a form of employee mobility, in which employees leave their former employer to pursue opportunities in their newly created and owner-managed legal entity. These entrepreneurs introduce ideas from their prior work experience to new contexts (generalization), and sometimes substantially differentiate these ideas in order to adapt to new selection environments (differentiation) (see Stam & Nooteboom, 2011). A number of studies show that one particular legal constraint on employee mobility – employee non-competition agreements[60] – lowers the ability of employees to move from one firm to another (Gilson, 1999; Fallick et al., 2006; Marx et al., 2009). These employee non-competition agreements are intended to help firms protect their investments in human capital, intellectual property[61] and relationships: firms can increase their productivity by training their workers, by developing new products and processes, as well as by building valuable relationships with customers and suppliers (see Franco & Mitchell, 2008). These non-competition agreements may, however, also reflect the vested interests of incumbents that want to restrict the possibility of employees striking out on their own, and exploiting their knowledge outside the former employer. In this respect, employee

[60] The fact that this is a non-competition agreement means that this institution is of less relevance in non-competitive settings of public research institutes and their potential spin-offs.

[61] Marx et al. (2009) showed that patents (the regular legal protection of inventions) and non-competition agreements are complements, not substitutes. Both are legal institutions to control knowledge, either embodied knowledge (non-competition agreements) or codified knowledge (patents).

non-compete agreements act as a constraint on the creation of spin-off firms (see Stuart & Sorenson, 2003; Samila & Sorenson, 2009).

Intellectual property rights

Entrepreneurs wanting to develop new technologies and introduce them in the market face Arrow's disclosure problem (Arrow, 1962): the value of a new technology to any one buyer may be decreasing in the number of other potential buyers who have been able to evaluate the new technology due to information leakages in the valuation process (value rivalry). There is thus a risk of expropriating the 'rights' to use this new technology of the inventor if this invention has not been registered and protected by intellectual property rights. The enforcement of patents or licensing agreements acts as an entry barrier that significantly reduces the potential for user reproducibility. Patent rights explicitly prevent would-be buyers from using the idea for commercial gain without the permission of the technology seller. The legal institution that solved this disclosure problem is the protection of intellectual property rights via patents (see Gans & Stern, 2010). New firms that specialize in the development of new technologies can thus claim the property rights of the inventions involved, and gain from trading the use rights of this invention with licensing on a market for technology (see Arora et al., 2001). The availability of intellectual property protection by patents has been instrumental in the rise of the number of new firms in knowledge-intensive sectors like biotech and R&D services[62].

Strong property rights have been argued to exercise a fundamental positive effect on all economic activity. For entrepreneurship, it is important that the property rights guarantee the status quo, and also include the 'find and keep' component,

[62] However, there is increasing evidence on the malfunctioning of the (US) patent system: see Bessen & Meurer (2008) and Jaffe & Lerner (2004).

which is essential for aspects of entrepreneurship related to discovery, innovation and creation of new resources (Harper, 2003). Acemoglu and Johnson (2005) show that property rights institutions have pronounced effects on investment, financial development and long-run economic growth, and Boettke and Coyne (2003) even assert that institutions are the ultimate cause of growth, whereas entrepreneurship is just a proximate cause, since according to them its supply and direction are fully determined by the institutional setup. Aidis et al. (2009) reveal that among various institutional indicators, the property rights system plays pivotal role in determining entrepreneurial activity, especially in developing countries. Johnson et al. (2002) provide evidence that weak property rights discourage entrepreneurs to reinvest their retained profits into their businesses. Strong property rights are particularly important for ambitious entrepreneurship. Ambitious entrepreneurship implies both larger scale and (typically) more sophistication in economic activity; therefore, it tends to be more contract-intensive and to rely more on social contacts that go beyond the "family and friends" circle of trust. In addition, larger new firms are subject to higher risk of expropriation where property rights are not protected against arbitrariness of administration. Thus, while weak property rights do not discourage all entrepreneurial activity, they do hamper larger and more complex forms of entrepreneurship (Estrin et al., 2009).

There have been several studies on the impact of intellectual property rights regimes on ambitious entrepreneurship. These studies failed to find a direct effect of intellectual property rights systems on ambitious entrepreneurship (Autio & Acs, 2010; Bowen & De Clercq, 2008; Estrin et al., 2011)[63]. Autio and Acs (2010) report that intellectual property protection exercises an important moderating influence on the effect of an individual's household income (positive) and education

[63] For a large part of the population of new firms, especially those outside high-tech sectors, intellectual property rights are likely to have no effect at all.

(negative) on growth aspirations of entrepreneurs. They interpret their findings as follows: in countries with strong intellectual property rights regimes, markets for technology are well-functioning, providing (often highly educated) inventors the possibility to sell (i.e., appropriate the returns of) their ideas in the market instead of pursuing them with a newly established firm. When markets for technology work well, individuals from high-income households can use their financial resources to buy the intellectual property produced by others, and use this to grow their newly established firm. Furthermore, adopting signalling theory, Levie and Autio (2011) find that individuals' engagement in what they call 'strategic entrepreneurship' is enhanced in institutional environments that combine securing intellectual property rights with a strong rule of law. They argue that the signals institutional environments with this particular combination bring about are conducive to new entrepreneurial activities in general, but even more so to ambitious types of entrepreneurship.

7.4 CONCLUSIONS

Institutions do not direct economic behaviour, such as entrepreneurship, but enable and constrain economic behaviour. Institutions not only affect the level, but also the type of entrepreneurship. In this chapter, we distinguished informal and formal institutions as explanatory variables, and self-employment, entry and ambitious entrepreneurship as variables to be explained. Informal institutions can shape the motivations of individuals – for example, affecting their preference for self-employment over employment, or the growth attitude of (potential) entrepreneurs. Formal institutions enable and constrain entrepreneurship: certain basic

formal institutions are needed to make (ambitious) entrepreneurship possible, and certain formal institutions (e.g., those related to intellectual property protection) moderate the relationship between abilities and growth intentions.

CHAPTER 8

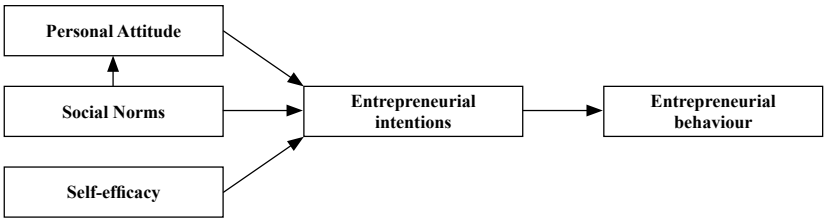
EXPLORATORY FUTURE RESEARCH

After reviewing the literatures directly and indirectly related to ambitious entrepreneurship, we now turn to the construction of a model that brings together these pieces in a coherent, but still parsimonious, fashion. The tables in Chapter 1 provided the starting point for the review of the literature in Chapters 2 to 7. The literature can to a large degree be captured in a few explanatory models of entrepreneurship. We subsequently discuss an extended theory of planned (entrepreneurial) behaviour, in order to explain the transitions to entrepreneurial intentions and behaviour (see Chapters 2 and 3), present an extended version of Davidsson's (1991) model of growth motivation and growth realization (see Chapters 5 and 6), and propose a model on the allocation of entrepreneurial talent (see Chapter 7). The key concepts in these models are attitudes, motivations, abilities, resources, opportunities, institutions, intentions and growth. Note that we do not include many references in this chapter, given the extensive reviews presented in the other chapters.

8.1 ENTREPRENEURIAL INTENTIONS AND BEHAVIOURS

The first step in the explanation of ambitious entrepreneurship is the transition from (ambitious) citizen to (ambitious) entrepreneur. Why do some people decide for entrepreneurship, whilst many others do not? In this context, we suggest the simple model of entrepreneurial intention and behaviour that is visualized in Figure 8.1, which is an extension of psychology's well-known model of planned behaviour.

Figure 8.1: A causal model of entrepreneurial behaviour



Empirical research has shown that entrepreneurial intentions are an important, but not a necessary condition for entrepreneurial behaviour. There is a substantial group of necessity entrepreneurs, who did not necessarily had the intention to start a business, but were more or less forced by circumstances to earn a living in that way. However, for opportunity-based entrepreneurship, entrepreneurial intentions are a close to necessary condition, indicating that uncovering the antecedents of entrepreneurial intentions might deliver important insights in the explanation of ambitious entrepreneurship. Entrepreneurial intentions are strongly driven by, on the one hand, a favourable personal attitude towards entrepreneur-

ship and, on the other hand, the perceived ability (self-efficacy) to perform entrepreneurial tasks.

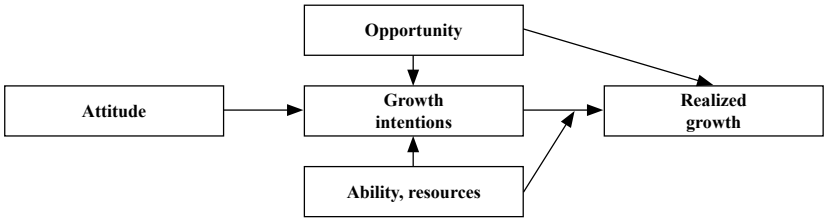
There is less, but still considerable, empirical evidence on the effect of social norms (via family, friends, role models and other 'significant others') on entrepreneurial intentions: this effect could be direct (even if the individual has no positive attitude towards entrepreneurship, her or his social environment might stimulate entrepreneurial intentions) or indirect (as personal attitudes are likely to be affected by significant others). In addition, we learnt in Chapter 4 about the importance of motive-goal congruence: this means that it is unlikely that entrepreneurial goals (intentions) without a positive attitude towards entrepreneurial behaviour will lead to a commitment to entrepreneurial behaviour. In the context of intrapreneurship, these social norms do not only include the wider social environment, but also the more direct organizational context (job design and work context; see Chapter 3).

8.2 GROWTH AMBITIONS AND REALIZED GROWTH

The next step in our chain of logic has to do with the transition from mere entrepreneurship into one that is associated with (high) growth. One of the stylized facts in industrial economics is that entry is easy, but survival and growth are not (Geroski, 1995). This supposes that economic conditions are more relevant for the explanation of post-entry performance than entry per se (Geroski, 1995; Vaessen, 1993), and alternatively that psychological factors might be (relatively) more important in the explanation of entry than in survival and growth. However, empirical research has shown that the intention to grow is close to a necessary condition for

new (and small) firms to grow (Davidsson 1991; Stam & Wennberg 2009; Wiklund & Shepherd 2003). Growth intentions are thus a very important antecedent to realized firm growth, and need to be explained in their own right. The intention to grow can largely be explained by the ability of entrepreneurs to perform the relevant tasks for growth in combination with the amount of resources (financial and social capital; see Chapter 5) to which they have access, the attitude towards growth, and opportunities for entrepreneurial growth. This model is presented in Figure 8.2.

Figure 8.2: A causal model of growth intentions and realized growth



Growth attitude consists of the founder's feelings and expected consequences of firm growth, which we regard as antecedents of growth intentions. Expected consequences of growth include, for example, the entrepreneur's control over the business, employee well-being, and personal income (see Wiklund et al., 2003). Another important attitudinal antecedent of growth intentions is the need for achievement. This relation has not yet been studied satisfactorily (see Chapter 4), but we expect a hill-shaped relation here, as the need for achievement emphasizes high but obtainable goals (what is obtainable depends on the perceived behavioural control)[64]. Independence is an important motive to start the venture-creation

[64] Significant others might also have high expectations of the performance of a person, entrepreneurial or not, and in this way trigger a high need for achievement.

process in general, but at the same time it is negatively – slightly non-linear with an inverse U-shape – related to growth intentions. The need for recognition (cf. the 'need for affiliation' in Chapter 4) also turns out to have a negative association with growth intentions. In addition, the opportunities that are (perceived to be) present are an important factor here as well (Levie & Autio, 2008). The opportunity structure of a country (e.g., as reflected in the size of the home market and the growth of the economy) has a direct effect on venture growth (Teruel & de Wit, 2011). However, many, if not most, entrepreneurs who have the ambition to grow their business do not realize this, pointing at the importance of other enablers or constraints on top of a country's opportunity structure. Indeed, the abilities and resources of the entrepreneur have a significant moderating effect on the relation between growth intentions and realized growth.

More specifically, the literature reveals that formal institutions like employment protection legislation may have a negative effect on growth attitude: for ambitious employees leaving their secure job for a highly insecure occupation as founder of a start-up may become less attractive in conditions of strong employment protection. Moreover, formal institutions play an important role for the ability to grow a firm or to get access to resources – for example, employment protection legislation that negatively affects labour market flexibility is bad news for the chances of young (risky) firms to attract human resources. In a more indirect way, formal institutions moderate the relation between ability and growth intentions: examples are non-compete covenants that negatively moderate the relation between human capital and growth intentions, and intellectual property right protection that positively moderates the effect of wealth on growth intentions (see Chapter 7).

An additional mechanism concerns the opportunity costs of growth for the foun-

der (cf. Cassar, 2006): here we expect that founders with relatively high levels of human capital are more likely to have a positive growth attitude, because their alternative option is a well-paid job, which is more likely to be matched in monetary terms with the income generated by a high-growth (large) new firm, than by a small firm. Confirming this line of reasoning, it has been found that especially financial success as a founding motivation is positively related to growth intentions. Research on implicit and explicit need for achievement (see Chapter 4) suggests that conditions that foster extrinsic motivation (e.g., via changing formal institutions) will only stimulate growth intentions if the individuals involved also have high intrinsic motivations, and that stimulating extrinsic motivation beyond intrinsic motivations is not going to be effective.

With respect to realized growth – and, more directly, firm survival – individuals can have a too high perceived behavioural control, also known as overconfidence (see Chapter 2): this is likely to positively affect the choice to start a business, but to have a negative effect on survival. In a related fashion, entrepreneurs have been said to be more likely to be persistently overoptimistic: this leads to the situation in which founders are consistently expecting too positive outcomes – i.e., higher growth realizations than obtainable in reality (indeed, a large share of the founders with growth ambitions never realize this growth; see Chapter 6). It might be an interesting research avenue to analyze to what extent overoptimism as part of a national culture leads to relatively high growth expectations of firm founders in particular countries, leading to relatively high failure rates at the micro level, but potentially also high rates of catalyst ventures that might stimulate technological development and ultimately economic progress.

8.3 INSTITUTIONS AND THE ALLOCATION OF (ENTREPRENEURIAL) TALENT

In the institutional analysis of entrepreneurship, prior work deals with exploring answers to four key questions:

1. What determines the allocation of citizens over different occupational categories (unemployed, employed and self-employed)?;
2. What determines the allocation of entrepreneurial talent amongst self-employed and employers?;
3. What determines the allocation of entrepreneurial talent over the different contexts of entrepreneurship?; and
4. What determines the allocation of entrepreneurial talent over destructive, unproductive and productive entrepreneurship?

We will deal with these questions in the next subsections.

Institutions and occupational choice

For answering the first question, we have to look at how informal institutions affect the entrepreneurial attitude of individuals, at how labour market institutions influence the incentive structure for the occupational choice, and at product market institutions that impact the barriers to entry and exit for firms (cf. Audretsch et al., 2001; see Chapter 7).

Informal institutions, on the one hand, reflect deeply ingrained habits, norms and values of particular groups that are hard to change over a short period of time. Formal institutions, on the other hand, are more malleable, and thus more likely to

affect entrepreneurship levels in society. For example, labour market policy is highly relevant here, breaking up insiders' positions in favour of outsiders. This might have different effects, depending on the positions of individuals in the labour market: for ethnic minorities that were largely excluded from well-paid jobs, such labour market policy might make their 'refugee' entrepreneurship less attractive, while for well-paid older employees in very secure jobs this might lower the opportunity costs for being self-employed. In addition, such opening up of the labour market is also providing a safety net for employees who strike out on their own as independent entrepreneur, and subsequently fail and re-enter as wage-earner.

Another set of relevant institutions relates to product markets. A key element here is competition policy, as this is likely to affect the space for newcomers. For instance, monopolistic or oligopolistic industry structures dominated by large incumbents may not be likely to make entry through independent entrepreneurship a profitable option if scope economies are very important (Van Witteloostuijn & Boone, 2006). For entrepreneurship to flourish, competition policy, too, should remove insider (incumbent) advantages in favour of outsiders (entrants).

A final set of formal institutions involves the burden of regulation more generally. Even though a 'regulatory burden' (e.g., through the mere quantity of regulations) in general might be harmful to entrepreneurship (see Capelleras et al., 2008; Levie & Autio, 2011), high-quality regulations might make transactions in the formal economy less expensive than in the informal or 'black' economy. Regulations designed and implemented by governments should not frustrate innovations, as the example of the rise of well-governed digital market places shows us: these digital market places make it attractive for previously unemployed (or people active in the informal economy) to be become self-employed traders.

For ambitious entrepreneurship, the relevant question is how ambitious and talented employees may be stimulated to become more entrepreneurial, either by striking out on their own or through intrapreneurship. The problem with the occupational choice literature is twofold in this respect: first, it only includes independent entrepreneurship, and thus excludes entrepreneurial behaviour within existing organizations (see Chapter 3, and Section 8.4.3 below); and, second, it does not distinguish between self-employed sole traders and employers. We will deal with this latter aspect in the next subsection.

Allocation of entrepreneurial talent: self-employed or employer

The second question involves studying the effect of labour market regulations for the pay-offs of being an employee, self-employed or an employer. The latter occupation being most closely related to ambitious entrepreneurship, in the sense that ambitious entrepreneurs create new multi-person organizations, and thus become employers. Becoming an employer is likely to be constrained by strict employment protection legislation, because this makes it harder for new employer firms to attract employees from incumbents, and makes it less attractive for risky new ventures to attract new personnel that cannot easily be fired during (temporary) setbacks[65].

Similarly, within other policy domains there might be regulations that may imply that being an employer becomes less attractive. An example is heavy social security regulation, which shifts much of the burden of risk to the employer, or fiscal policies that discriminate against multi-person organizations. A better understanding of these types of barriers requires detailed analyses of specific policies that often seem not to be related to issues of employer-entrepreneurship at all.

[65] A rise in the number of employer firms will increase the demand for labour, make employees more scarce, and is likely to push up wages, which in turn make it relatively less attractive to be self-employed or an employer (Glaeser et al., 2010).

In addition, there is evidence that the strength of property rights protection is a key determinant for choosing between self-employment or becoming an employer (Estrin et al., 2011). Entrepreneurs who just want to become self-employed can rely on informal institutions and localized trust to build self-efficacy necessary for successful entry. However, higher growth aspiration projects require more reliance on formal, impersonal institutions and the stability they may offer. Hence, weak property rights become a binding constraint for entrepreneurial development to higher aspiration prospects, like creating employer firms.

Locus of entrepreneurial behaviour

There has been only very limited attention for the locus of entrepreneurial activity in academic research. There is hardly any research on the allocation between private entrepreneurship and private intrapreneurship (with the only exception being Bosma et al., 2010; 2011a), and no research at all on the prevalence of entrepreneurial activity in the (semi-)public sector. This lack of research on entrepreneurship within existing organizations, private or public, is a huge shortcoming given the size of 'organizational life' in the economy and society as a whole, but understandable by the 'private independent' entrepreneurship bias of the literature. Probably much more can be achieved in this area by combining the management literature with advances in the field of labour economics.

In addition, in the public as well as the academic debate, private entrepreneurship driving the 'invisible hand' is generally perceived as being better for society than the 'grabbing hand' of public entrepreneurship (cf. Shleifer & Vishny, 1998), and the employment growth of public entrepreneurship initiatives is often regarded as a temporary phenomenon that should be aborted in the medium run (only

considered to be successful once it has proven its redundancy, after realizing its public targets). All this is quite in contrast to the heroic tales of long continuing (once) entrepreneurial ventures like Apple, Microsoft and Wall Mart that are argued to be better equipped to act on new opportunities or to change strategies when required. Given the fact that some very successful economies in the world run very large (semi-)public sectors, well-known examples being the Netherlands and Scandinavia, a critical reassessment of these biases in the literature seem to be warranted.

As illustrated by the abovementioned examples, there are many appraisals on both private and public entrepreneurship (Hargadon & Douglas, 1999; Munir & Phillips, 2005). At the same time, however, the 'dark sides' of both forms of entrepreneurship should not been disregarded (see, e.g., Kets de Vries, 1985; Khan et al., 2007). In general, studies on the impacts of (ambitious) entrepreneurship should take a more encompassing role and compare benefits as well as potential costs of particular types of entrepreneurship. This is, for instance, quite common practice in assessing the impacts of urbanization (with opportunities to large levels of supply and demand, diversity and creativity, but at the same time threats in terms of accessibility, health and potential riots; see Bettencourt et al., 2007). This is the issue central to the next subsection.

Allocation of entrepreneurial talent

The 'killer-question' that touches the roots of capitalist systems is the question of what determines the allocation of entrepreneurial talent over destructive, unproductive and productive entrepreneurship (cf. Baumol, 1990; Douhan & Henrekson, 2010)[66]. This concerns the macro effects as discussed in Chapter 1 and presented

[66] The literature is somewhat ambiguous with respect to the term entrepreneurship here, as some authors (e.g., Acemoglu, 1995; Murphy et al., 1991) assume entrepreneurship to be productive in all circumstances, and label unproductive activities as 'rent-seeking'.

in Table 1.3. Uncovering the role of institutions in this is extremely difficult as economies are ever evolving complex systems in which opportunities for both productive and destructive entrepreneurship are constantly popping up and disappearing. This, however, does not leave the government empty handed. For one, it has a minimal role to play in safeguarding the basic institutions that enable production and exchange, and to invest in public knowledge as a source of entrepreneurial opportunities. Moreover, government has a more proactive role to play in taking away the barriers for experimentation with new combinations (cf. Rosenberg & Birdzell, 1986), which might involve productive success entrepreneurial entries, but also catalyst ventures. Even more interventionist actions might be taken to constrain destructive entrepreneurship: most obviously when it involves unlawful behaviour; and less obviously when it relates to lawful, but societally destructive behaviour. Two examples might be insightful here: first, even though intrapreneurship in the banking sector might be productive, we have recently seen a situation in which they received the profits of their gambling behaviour, but losses were socialized; second, loosening bankruptcy regulation might stimulate more risky new ventures to be established, but it might also attract destructive entrepreneurship that will use bankruptcy regulation for their own profit (cf. Akerlof & Romer 1994). Government may also play a more paternalistic role in stimulating individuals to move from unproductive to productive entrepreneurship – for example, by opening up government procurement for innovative projects to solve societal problems (see Mazzucato, 2011).

Research adopting the typical Baumol (1990) categorization of productive, unproductive and destructive entrepreneurship has so far predominantly focused on classic economic outcomes, measured by economic growth and, preferably, Total

Factor Productivity. An exception is Urbig et al. (2011), offering an experimental study of entrepreneurial decision-making that may generate negative or positive spillover effects for others than the individual entrepreneur. Probably, recent calls for a higher importance attached to (non-monetary) public value creation will lead to an increased appreciation of socially productive and environmental-enhancing entrepreneurship (Dees et al., 2004; Mair & Marti, 2006; Zahra et al., 2008). In a nutshell, this boils down to foster institutions in such way that a proper balance is found between monetary objectives, social objectives and environmental objectives, and that these macro-level objectives are recognized accordingly by the collective of individual entrepreneurs.

8.4 FUTURE RESEARCH

From the foregoing discussion, it is clear that the field of entrepreneurship research is ripe for a renaissance. Future researchers would be well advised to undertake a serious review of research in the fields of psychology (behavioural economics) and institutions, and to adopt comparative and longitudinal research designs. With this in mind, we propose a new agenda for future research into the antecedents of ambitious entrepreneurship as follows.

Our proposed research agenda focuses primarily on correcting the research design methodological problems addressed in the preceding chapters. Firstly, it is of utmost importance that a clear definition of ambitious entrepreneurship serves as the cornerstone of the research programme. Secondly, appropriate variables must be derived from the definition of ambitious entrepreneurship that can be easily operationalized in empirical studies. This would involve data collection on both im-

plicit and explicit motive dispositions using appropriate measurement instruments – i.e., a projective test and a self-reporting questionnaire, respectively. This would essentially be a replication of the Schultheiss and Brunstein (2001) and Schultheiss et al. (2009) studies, but with a sample population that specifically includes entrepreneurs. In order to provide a cross-country perspective, this exploratory data collection could be undertaken in several countries. It should be noted that the motive assessment employed should be suitable for the measurement of all relevant motive dispositions (i.e., achievement, power, independence, innovation, affiliation, and intimacy). This requires measurement development work as well because, to the best of our knowledge, instruments for measuring implicit need for independence and innovation are not yet available, nor is one for measuring explicit need for innovation.

Next, a study of ambitious entrepreneurship would require special attention to the compilation of an appropriate sample of actual entrepreneurs. Carefully selected samples of ambitious and non-ambitious entrepreneurs, in line with Definitions 1 and 2, should be included in the context of a panel design. Only then can entrepreneurial processes can be studied in a comparative way. By comparing ambitious entrepreneurs with a "control group" of non-ambitious entrepreneurs, we can more accurately evaluate how antecedents are related to consequences. With an appropriate research design, we would then test our propositions as hypotheses. Within such an initiative, it makes sense to also discern ambitious social entrepreneurs. Zahra et al. (2008) provide an overview of definitions of social entrepreneurs and discuss three types of social entrepreneurs who vary in how they define opportunities, view their missions, acquire resources, and address social ills. Two of these can be seen as ambitious social entrepreneurs: social constructionists (inspired by

Kirzner's contributions, aimed at providing goods and services addressing social needs that governments, agencies and businesses cannot) and social engineers (built on Schumpeter's legacy, involving creation of newer, more effective social systems designed to replace existing ones when they are ill-suited to address significant social needs).

The focus on motivations and abilities of the ambitious entrepreneur has come with a lack of research and theorizing on the role of the context on ambitious entrepreneurship. In this report, we attempt to put the role of institutions more centre stage. Keeping in mind our multi-level approach to the study of ambitious entrepreneurship, a subsequent opportunity for future research would involve further exploratory testing to identify salient environmental constraints and incentives that may have a mediating or moderating effect on ambitious entrepreneurship. The importance of these environmental influences is well known from contingency and institutional theories on entrepreneurship (see, e.g., Parker & Van Witteloostuijn, 2010; Urbig et al., 2011). This may also lead to some insights regarding ambitious and self-sufficient entrepreneurship, and possible differences across countries and cultures. If these methods are applied in several different countries, as suggested, the results could provide a first insight into the differences in ambitious entrepreneurs and entrepreneurship across countries.

To the best of our knowledge, no study of this type has ever been performed. Therefore, the added value of such a research project would be fourfold. Firstly, it offers us a unique opportunity to make a pioneering contribution to the study of entrepreneurs and entrepreneurship in terms of research design and applied methodologies. Secondly, an appropriately designed and executed study would overcome many of the obstacles that have led to ambiguous and inconsistent research

findings in the past, and would thereby allow us to extend the extant body of knowledge in important ways. Thirdly, such an approach would achieve our goal of expanding the study of entrepreneurship from one level (i.e., the individual) to a multi-level analysis, by looking at national-level patterns and comparing these patterns across countries to discern possible similarities and differences. Finally, we hope to be able to answer our original dual research question: namely, why are some entrepreneurs more ambitious than others and are there differences across different groups (countries, cultures)?

CHAPTER 9

POLICIES FOR AMBITIOUS ENTREPRENEURSHIP

Based on our literature review, as well as past efforts to identify policies for ambitious forms of entrepreneurship, a number of guidelines and implications can be identified. In this chapter, we first briefly argue why it is actually urgent to develop policy interventions for ambitious entrepreneurship. Both Belgium (including Flanders) and the Netherlands are lagging behind when it comes to nascent and young entrepreneurs' growth ambitions, innovative entrepreneurship and international orientation. Some relevant statistics are presented in Section 9.1[67]. Next, Section 9.2 offers guidelines and implications for future policy development. These guidelines are connected with the theory and empirics as much as possible.

[67] We do not provide a detailed discussion of the legitimacy of policies for ambitious entrepreneurship here, which includes arguments like market failure and government failure (see EIM, 2008; Nooteboom & Stam, 2008; OECD, 2010).

9.1 AMBITIOUS ENTREPRENEURSHIP IN THE LOW COUNTRIES

The Global Entrepreneurship Monitor (GEM) offers international benchmarking statistics regarding the level of self-employment and new firm formation. Moreover, few indicators on aspects of ambitious entrepreneurship – mainly related to growth – can be analysed with these data.

Entrepreneurship

To have an indication of how many individuals in the labour force have engaged in entrepreneurship in the occupational sense, Table 9.1 presents the self-employment rates in various countries. Belgium and the Netherlands generally have self-employment rates that are up to par with the EU average. In the past three years, however, self-employment in the Netherlands has grown considerably so that the country is now in the lead. A similar table can be provided revealing the entry rates in various GEM countries.

Table 9.1: Self-employment as a percentage of labour force

	2001	2002	2003	2004	2005	2006	2007	2008	change 01-08
Belgium	11.5	11.6	11.3	10.7	11.1	11.1	11.5	11.1	-3%
Denmark	6.4	6.7	6.5	6.3	6.4	6.9	6.9	7.0	9%
Germany	8.6	8.6	8.8	9.3	9.6	9.7	9.7	9.7	13%
Finland	7.8	7.9	8.1	8.2	8.3	8.6	8.5	8.8	13%
France	8.2	8.1	8.1	8.2	8.4	8.6	8.7	8.8	7%
Ireland	11.4	11.4	11.4	11.8	11.5	11.0	11.6	11.6	2%
Italy	20.9	20.7	20.8	20.9	21.0	21.0	21.0	20.4	-2%
Netherlands	10.4	10.3	10.5	10.7	11.0	11.5	11.9	12.1	16%
United Kingdom	10.4	10.4	11.0	11.2	11.1	11.2	11.4	11.4	10%
EU-15	11.5	11.5	11.6	11.8	12	12.1	12.2	12.1	5%
Japan	9.3	9.2	9.1	9.1	9.0	8.8	8.6	8.4	-10%
United States	10.0	9.8	10.0	10.1	10.1	10.1	10.1	9.8	-2%

Source: EIM (Compendia Database).

Table 9.2 shows that, in the past decade, the entry of new entrepreneurs has been on the rise in both Belgium and the Netherlands. In the Netherlands, an increasing number and share of citizens aged 18-64 nowadays engages in new venture creation. Moreover, in terms of total entrepreneurial activity (7.2 percent of the adult population in 2010), the Netherlands now ranks highest in the EU, and even higher than the US, while Belgium ranks very low with only 3.7 percent (Kelley et al., 2011; see also table 9.3).

Table 9.2: Entry rates (new firms as a percentage of all firms)

	2001	2002	2003	2004	2005	2006	2007	2008
Belgium	6.5	6.5	6.5	7.3	7.7	8.4	9.3	9
Denmark	10.1	9.2	10.8	10.8	12.5	13.3	12.7	n.a
Germany	9	8.8	9.7	10.3	8.8	8.1	7	6.6
Finland	8.4	8.6	9.4	10.2	10.8	11.5	11.8	11.1
France	6.8	6.7	7.8	6.5	6.4	6.6	6.9	7.1
Ireland	12.6	11.9	12.5	13.3	13.9	14.5	11.6	8.8
Italy	7.9	7.7	7.3	7.7	7.6	7.6	7.9	7.1
Japan	4.1	4.3	5.4	5.4	n.a	4.1	n.a	n.a
Netherlands	9.7	8.1	8	8.8	9.9	10.5	11.6	12.8
United Kingdom	12.7	12.6	13.2	12.7	12.1	12.1	13.2	13
United States	9.5	9.5	9.2	9.7	10	9.9	9.9	9.6

Source: EIM (Benchmark Entrepreneurship).

Table 9.3: Total entrepreneurial activity rates (% of the adult population actively involved in preparing or running a new business)

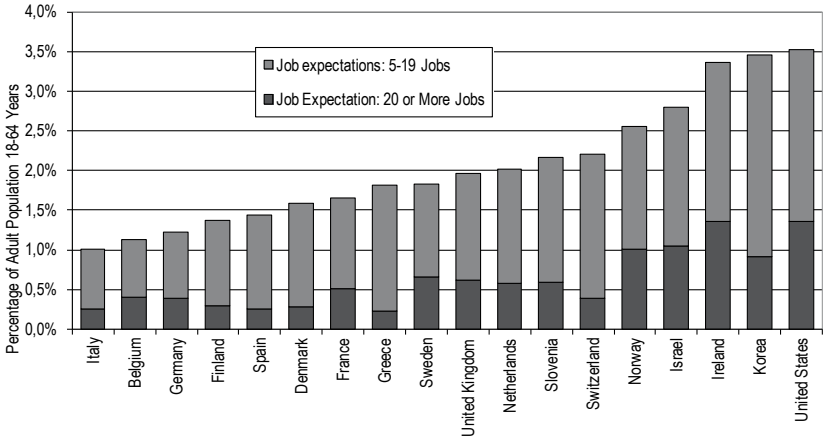
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Belgium	3.1	3	3.9	3.4	3.9	2.7	3.1	2.9	3.5	3.7
Denmark	5.1	6.5	5.9	5.3	4.7	5.3	5.4	4	3.6	3.8
Finland	4.5	4.6	3.1	4.4	4.9	5	6.9	7.3	5.2	5.7
France	2.6	3.1	1.6	6	5.4	4.4	3.2	5.6	4.3	5.8
Germany	5.8	5.2	5.2	4.4	5.1	4.2	-	3.8	4.1	4.2
Ireland	11.4	9.1	8.1	7.7	9.8	7.4	8.2	7.6	-	6.8
Italy	6	5.7	3.1	4.3	4.9	3.5	5	4.6	3.7	2.3
Netherlands	4.7	4.6	3.6	5.1	4.3	5.4	5.2	5.2	7.2	7.2
United Kingdom	5.4	5.4	6.4	6.2	6.2	5.8	5.5	5.9	5.7	6.4
Japan	1.9	1.7	2.8	1.5	2.2	2.9	4.3	5.4	3.3	3.3
USA	11	10.6	11.9	11.3	12.4	10	9.6	10.8	8	7.6

Source: Global Entrepreneurship Monitor.

Ambitious entrepreneurship

The GEM also measures and benchmarks various aspects of ambitious entrepreneurship. A first relevant indicator includes starting entrepreneurs' growth expectations (if they expect to employ 20 or more persons or, alternatively, 5 to 19 persons in five years time). With respect to such expectations, Belgium is lagging behind considerably and the Netherlands takes a position in the middle, as can be seen in Figure 9.1.

Figure 9.1: Job expectations five years ahead



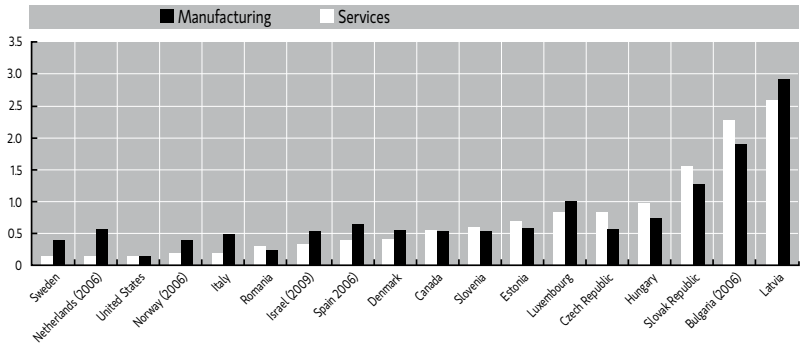
Source: Global Entrepreneurship Monitor 2008-2010

Other GEM indicators reflecting ambitious entrepreneurship include starting entrepreneurs' international orientation, product offerings (if all, few or no other firms offer the same product or service) and product innovativeness (if their product or service offering is new to all, some or none of their customers). On these

indicators, both countries again take a modest position when it comes to international benchmarking – innovative entrepreneurship, for example, is considered in weakness in Dutch nascent entrepreneurship (Hartog et al., 2011).

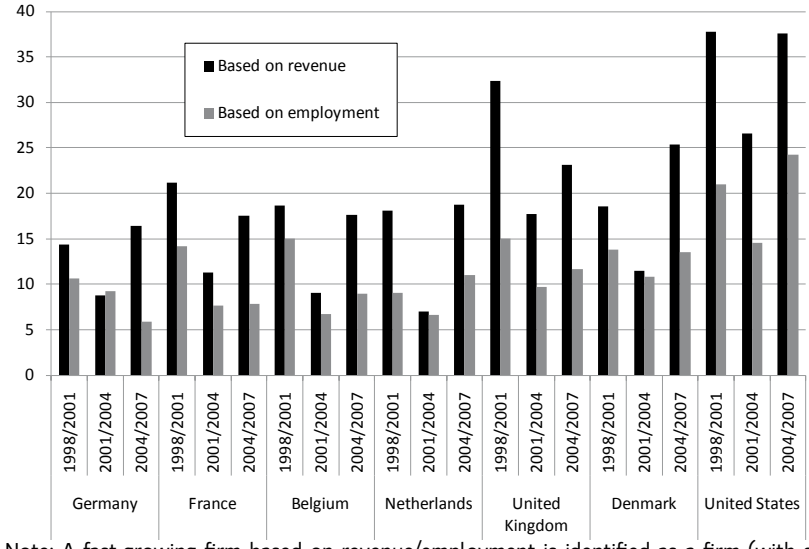
A third group of indicators is concerned with growth realizations rather than expectations. In Figure 9.2 an international comparison of the prevalence of gazelles is shown. Gazelles are here defined as high-growth enterprises born five years or less before the end of the three-year observation period (OECD 2011: 76-77). Growth is measures in terms of employment, and gazelles are enterprises which have been employers for a period of up to five years, with average annualized growth in employees greater than 20% a year over a three-year period and with ten or more employees at the beginning of the observation period. The share of gazelles is expressed as a percentage of the population of enterprises with ten or more employees. In Figure 9.3, relevant statistics from EIM's annual international entrepreneurship benchmarking study are presented. Drawing on a representative sample of firms with 50-1000 employees, the figure shows the percentages of fast-growing firms in the total stock of firms in the private sector in terms of (1) revenues and (2) employment. These comparisons put Belgium and the Netherlands slightly below the UK and Denmark, and well below the United States. While the number of new firms has grown substantially over the past decades, the number of high-growth firms has not grown in a similar way over the past 15 years (also see Stam & Bos, 2011) and is modest from international perspective (Snel et al., 2010). Instead, the positive trend of entrepreneurship in the Netherlands is almost entirely explained by an increase in the so-called 'self-employed without personnel' (or "zzp-er", in its Dutch acronym; Hartog et al., 2011).

Figure 9.2: Share of gazelles in different countries (2007)



Source: OECD 2011

Figure 9.3: Share of fast-growing firms in different countries (2007)

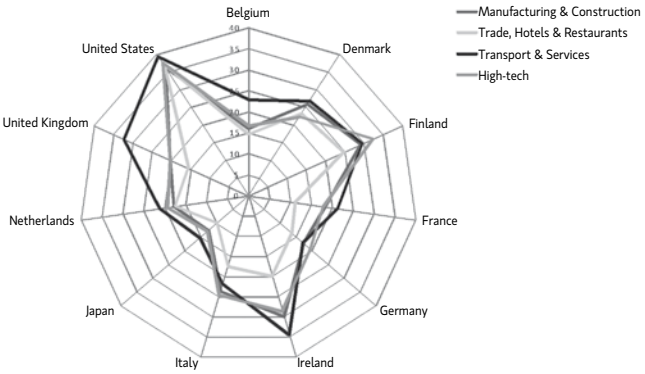


Note: A fast-growing firm based on revenue/employment is identified as a firm (with size between 50 and 1,000 employees) that has experienced a growth in total revenue/employment of at least 60% over the last three years.
Source: EIM

Next, Figure 9.4 demonstrates that when considering the percentage of high-growth firms in various sectors of the economy, the US is clearly leading. Again, Belgium and the Netherlands are lagging behind and only defeat Japan.

In conclusion, self-employment rates are rather high for Belgium and the Netherlands. In addition, for both countries, the annual number of new firms has grown over the past years to levels that compare well to, or are even better than, other European countries and the United States. However, the number of ambitious entrepreneurs appears to be modest from international perspective. As ambitious entrepreneurship can be considered most essential for general economic progress, this is a strong argument for policy intervention.

Figure 9.4: Percentage of fast-growing firms in different sectors (2007)



Note: A fast-growing firm is identified as a firm (with size between 50 and 1,000 employees) that has experienced a growth in total revenue of at least 60% between 2004 and 2007.
Source: EIM.

9.2 DIRECTIONS FOR FUTURE POLICY

This section provides directions for future policymaking, as far as these can be derived from our review of studies on ambitious entrepreneurship. These policy directions are clustered in five themes: stage specificity, education, labour market, intrapreneurship, and policy complementarities and conflicts.

Stage specificity

The review of studies related to ambitious entrepreneurship has revealed that there are four key transitions towards ambitious entrepreneurship (see Figure 1.1):

- First, to turn individuals into ambitious individuals, either with respect to performance ambitions (A1) or entrepreneurial ambitions (A2)
- Second, to transform (ambitious) individuals into (ambitious) entrepreneurs (in whatever organizational setting)[68];
- Third, to stimulate entrepreneurs to become ambitious entrepreneurs; and
- Fourth, to realize the creation of new value.

The state-of-the-art literature (as discussed in Chapters 2 to 7) makes evident that each of these transitions is marked by different determinants at the levels of individuals and contexts. It would be impossible to have it all at once. Basic entrepreneurship policies, for example, result in a sound base of entrepreneurs who could then develop strong ambitions to grow, innovate or engage in international business. Each transition also concerns different policy areas. The first transition relates to general social and education policy, targeting ambitions, while the second transition concerns classical entrepreneurship policy, focusing on entrepre-

[68] This involves a two-step process: triggering entrepreneurial intentions and realizing the start of a new business.

neurial behaviour. As for the third and fourth transition, more dedicated business policies can be offered that are more directly tailored to growth ambitions and the creation of new value. These policies concern, respectively, stimuli for human talent and ambitions, stimuli for entrepreneurship in general, incentives for the allocation of talent, incentives for the allocation of entrepreneurship, and removing the barriers for growth. Table 9.4 summarizes this reasoning.

Table 9.4: Correspondence between four transitions and key policy areas

Transition		**Key policy areas**	**Key stimuli (removal of barriers)**
A	-> ambitious individual	Social and education policy	Human talent and ambitions
B	(Ambitious) individual -> (ambitious) entrepreneur	Entrepreneurship policy	Allocation of talent; allocation of entrepreneurship (independent entrepreneurship / intrapreneurship)
C	Entrepreneur -> ambitious entrepreneur	Entrepreneurship and industrial policy	Allocation of entrepreneurship (self-sufficient / high-impact); growth attitude
D	Ambitious entrepreneur -> Realized new value creation	Industrial policy	Reduction or removal of growth barriers

Education

- Ambition formation during adolescence and youth -

Our framework starts with the transition towards ambitious citizens. Recall from Chapter 4 that the (particularly implicit) need for achievement is among the central factors in people's ambition. It is not a given trait, but can be developed, and

this happens to be most important during adolescence and youth. This implies that the primary and secondary education system becomes more relevant in a broad sense – for example, by influencing younger people's preferences, knowledge and skills. This would also include securing that entrepreneurial role models are present. As both Belgium and the Netherlands are increasingly entrepreneurial (see Section 9.2), this issue will partly solve itself – i.e., the more self-employed people, the more younger citizens will have entrepreneurial role models when growing up.

- Improving skills for ambitious entrepreneurship during tertiary education -

In addition to the importance of early education in targeting the first transition stage of raising generalized ambition (see above), tertiary education is an important context to support the transitions towards ambitious entrepreneurship, and its effectuation in the third and fourth transition stages. Recall that the development of ambitions to grow, innovate or internationalize heavily depends on individuals' cognitive abilities (see Chapters 3 and 6). On average, more highly educated entrepreneurs perform better. Indeed, entrepreneurs have even higher returns to education than employees (Hartog et al., 2011), and enrolment in tertiary education also has a positive effect on the number of fast-growing enterprises at the national level (Teruel & De Wit, 2011). Moreover, recall that meta-analyses have shown that human capital is important for venture success beyond self-employment, and that this relationship is stronger for human capital investments with high task-relatedness (Chapter 6). A further extension and intensification of entrepreneurship education (at universities and in professional education), therefore, seems sensible for promoting ambitious entrepreneurship as well.

Opportunities for growth

- Public investments in knowledge creation -

Public policy has a direct and indirect role in expanding the opportunity set for ambitious entrepreneurs to pursue. A direct role can be found in investing in public research that widens the knowledge base of society, and in opening up public procurement for innovation to newcomers (e.g., via programmes like the so-called Small Business Innovation Research Program), instead of to established parties. An indirect role can be played by lowering the barriers to international expansion of entrepreneurial ventures.

Labour market

- Labour market flexibility -

Recall from our discussion on institutions (Chapter 7) that employment protection affects ambitious entrepreneurship by its impact on the opportunity costs of becoming an entrepreneur (or joining a fledgling new business). For ambitious employees, these may be relatively high in regimes with strong employment protection legislation: leaving their secure job for a highly insecure occupation as founder of a start-up may become less attractive in conditions of strong employment protection. Hence, ambitious entrepreneurship would benefit from more flexible labour markets.

Moreover, in the later stages of our transition model, employment protection will make ambitious entrepreneurs more reluctant to hire employees, as it may be hard to get rid of them in bad times (as discussed in Chapter 7, too). Thus, beyond being helpful in removing incentives that discourage prospective ambitious entrepreneurs from leaving their tenured jobs and creating new enterprises, a lower

degree of employment protection would reduce the risks and impediments for new enterprises to create jobs and start growing.

- Unleashing high-potentials -

Our summary of the literature in Chapters 3 and 5 demonstrated that domain-specific experience matters for ambitious entrepreneurship. In both the independent entrepreneurship and intrapreneurship literatures, we find that management experience enhances entrepreneurial behaviour and willingness to grow. Likewise, industry experience has been shown to be important for growth and success. Also recall that growth-oriented entrepreneurs tend to be relatively highly educated and rather wealthy in terms of household income (Chapter 5). This implies that not any new entrepreneur is important, but that the focus should be on a special kind of individuals – i.e., those who have much to lose when engaging in entrepreneurship, and accordingly face high opportunity costs. Rather than 'necessity-driven' entrepreneurship (e.g., the transition to entrepreneurship by unemployed) policymakers should consider targeting experienced managers; if they can be persuaded to enter into business for themselves, they are much less likely to accept a position as a self-employed, and more likely to be willing to grow. Providing support and guidance to these potential high-growth entrepreneurs is merited. In the context of labour market institutions, labour markets should especially be made more flexible for the individuals that are best positioned to grow a new venture; these are also likely to face the highest opportunity costs for leaving their secure and well-paid job, when embarking upon a high risk-high gain project. This means that making it more attractive for *the best and the brightest* to start a potentially high growth venture is likely to be the most effective targeted policy action.

Intrapreneurship

In case informal institutions are (still) very much leaning towards employment protection (and changing formal regulations seems impossible) and simply to stimulate entrepreneurial behaviour in and of established enterprises, governments may do well to stimulate intrapreneurship in order to offset a lack of independent ambitious entrepreneurship and to keep capitalizing on the available entrepreneurial talent in the country. They should be aware that employers will have a dual attitude in this respect. On the one hand, their firm may benefit from the entrepreneurial behaviour of their employees. On the other hand, they may very well loose these talented people as – after getting the taste of it – they might start their own ventures after all. Indeed, intrapreneurship appears to be serving as a springboard for independent entrepreneurship (Bosma et al., 2011a).

In Chapter 3, we have argued that ambitious entrepreneurship does not necessarily revolve around individuals starting and growing new business ventures. The intrapreneurship literature explores general opportunity pursuit by individuals within incumbent organizations. At the level of individuals, similar antecedents are researched as in the independent entrepreneurship literature. In parallel with independent entrepreneurship, researchers are studying the influence of traits, demography and cognitive abilities on individual opportunity pursuit. The literature deviates in its definition of context variables – for example, by researching the influence of job design, managers and colleagues at work. It seems that most enterprises do not realize that alternative strategies can be conducted to benefit from their own workforce.

- Ambitious entrepreneurship within established organizations -

A first challenge for policymakers is then to raise innovating actors' awareness of corporate innovation strategies relating to intrapreneurship. Such awareness can be triggered in various ways – e.g., via sharing information on models and best practices, and by consultancy services on key aspects of strategy, management, organization, finance and risk management. It is probably helpful if enterprises first develop an overall strategy on how to benefit from knowledge. It can be developed through targeted support programmes aiming at raising the enterprises' ability to place innovation decisions and competencies to strategic ends. This has been done in many countries using external advisors – see, e.g., Norway's BUNT program and New Zealand's Current Position Analysis Program (AWT, 2006).

Entrepreneurship policy complementarities

As the second stage in our framework refers to the transition from citizen to entrepreneur, it is safe to conclude that the current policy mixes in both Belgium and the Netherlands already contain many good elements. From the perspective of ambitious entrepreneurship, it is positive that policies are offered to influence people's preferences for entrepreneurship, to enhance their knowledge and skills, to improve access to finance and labour, and to diminish the regulatory burden – at least to the extent that ambitious independent entrepreneurship is not possible without people willing to engage in self-employment first. Both countries also already offer growth-oriented policies, which represent an important element of ambitious entrepreneurship. Our framework does not completely upset entrepreneurship policy thinking, but suggests that complementary interventions merit attention.

- Traditional entrepreneurship policy and high-growth entrepreneurship policy -

However, especially in the third and fourth transition, policymakers have to be aware that the design of policy interventions should deviate from earlier transitions. To stimulate people's ambition and lure them into self-employment, policies can be broad and untargeted – examples include general programmes for entrepreneurship education, providing inspiration by means of role models, and offering general tax deductions for the self-employed. Such policies can be labelled as 'the more the better'. To stimulate the next transitions, however, policies should be much more selective. Truly high-potential ventures (and their entrepreneurs) tend to be well known in at least a limited industry circle, so it may be worth involving business angels, industry experts and incumbent suppliers and/or customers to help identify ambitious entrepreneurs. Next, some kind of mechanism is needed to screen and select those most promising individuals. For admittance, programmes should require explicit orientation toward growth (also see Chapter 5). Even though growth orientation cannot guarantee growth, growth in the absence of aspiration is extremely rare. Therefore, support programmes should require explicit commitment to growth as a key criterion. Second, the longer a venture progresses in its development path, the more tangible proof of its growth potential should be required. In the early phases of new ventures, growth orientation and flexibility should be emphasized – corresponding with the third stage of our transition model. In the more advanced (fourth) stage, tangible proof of market acceptance may provide a feasible selection criterion. For high-growth policies, Autio et al. (2007) summarized the main distinctions. Their summary is provided in Table 9.5.

Instead of focusing on quantitative aspects of entrepreneurship, to facilitate the third and fourth transition, policy should focus more on the qualitative aspects

of entrepreneurship. Empirical evidence suggests that an economy fostering (a few) high-impact entrepreneurial firms and high-growth firms, often referred to as gazelles, is superior to an economy trying to maximize the number of small and medium-sized enterprises or the rate of self-employment (Henrekson & Stenkula, 2010). Both types of policy are complementary, assuming that they can be offered in parallel with adequate funding.

Table 9.5: Classic versus high-growth entrepreneurship policy

Policy goal	**Traditional entrepreneurship policy**	**High-growth entrepreneurship policy**
Overall focus	Quantity	Quality
Entrepreneurs	Get more people to start new firms	Get the right people to start new firms
Entrepreneurial firms	Increase the number of entrepreneurial ventures	Improve the quality of entrepreneurial ventures
Operational environment	Facilitate SME entry and operation	Facilitate new firm growth
Resources	Mostly public	Public and private partnership
Resource distribution	A little to many	Much to a few
Fiscal	Reduce VAT for small firms	Accommodate dramatic change over firm life course
Type of support	Standard advice for firm creation and operation	Expert advice on growth and internationalisation

Source: Autio et al. (2007).

Conflicting entrepreneurship policies

- Traditional entrepreneurship policy or high-growth entrepreneurship policy -

Some of the differences can be so drastic that they may give rise to conflicts and trade-offs between traditional entrepreneurship policy and policies directed at ambitious entrepreneurs – for example, when a single Euro needs to be spend on few (3rd and 4th transition) or many entrepreneurs. Unlike traditional entrepreneurship policies, to stimulate ambitious entrepreneurship, policy resources should be spend on few 'high-potentials', rather than many individuals who never make it beyond self-sufficiency. In the second transition, the common policy goal of creating more businesses implies that public funding initiatives seek to provide at least some level of support to everyone. In the third and fourth stage of transition, however, providing limited help to everyone is not compatible with the objective of effecting substantial growth, innovation or internationalization. Only a small number of new firms have the potential for rapid growth, while their support needs can be demanding. When faced with limited public funding, this requirement may actually cause conflict between ambitious entrepreneurship and traditional entrepreneurship policies. In addition, stimulating self-employment may even harm ambitious entrepreneurship, as the incentives to stay self-employed may deter these solo entrepreneurs from expanding their business with recruiting other personnel. At first sight, a group of self-employed may substitute for a high-growth start-up, especially when project forms of organizing are dominant (e.g., in the construction industry and in multimedia productions). However, when it comes to scale economies and large-scale innovations, a thousand self-employed cannot substitute for one 'Google' or 'TomTom'. New firms that want to change the economy and society are more likely to succeed with a large group of like-minded people that are com-

mitted to the collective endeavour.

Finally, stimulating ambitious entrepreneurship requires ambitious policymaking. Marginal policies are likely to have a marginal effect. To really stimulate ambitious entrepreneurship, an ambitious policy mix is needed along the lines suggested above.

CHAPTER 10

A WRAP-UP

In this report, we had the ambitious aim to present a review of the extant literature on (ambitious) entrepreneurship in order to (a) develop an overarching framework of this complex and challenging topic so that we (b) could suggest a challenging agenda for future research and (c) list a number of new directions for policy. By way of wrap-up, we summarize our key argument with reference to the transition model presented in Figure 1.1.

A - From a 'regular' citizen to an individual with an orientation towards ambitious entrepreneurship. Ambition is the "determination to succeed", according to the *Oxford Dictionary*. In this study we have shown that this determination can be directed towards the achievement of an entrepreneurial role and/or towards the achievement of a particular performance. The development of an entrepreneurial intention has been central in Chapter 2. Performance achievement closely matches with one of the classical concepts in the psychology of entrepreneurship, namely

the need for achievement. Need for achievement (n Ach) is seen as a distinct human motive that is different from other needs. Achievement-motivated people have certain characteristics in common (McClelland, 1961): the capacity to set high personal but obtainable goals; the concern for personal achievement rather than the rewards of success; the desire for job-relevant feedback (how well am I doing?) rather than for attitudinal feedback (how well do you like me?). According to McClelland (1961), the n Ach is not a given trait, but can be developed. Both ambition and n Ach leave open what is to be achieved, and to what level. With respect to the last aspect, the adjective "ambitious" refers to being full of ambition (of any kind) or high aims (so more than the 'average' aim), while the need for achievement is somewhat more explicit here by emphasizing high but obtainable goals. In this study we have therefore taken need for achievement – or, more broadly, the motivational perspective on entrepreneurship – as our starting point in Chapter 4.

B – From non-entrepreneurship to entrepreneurship (with four possible loci). Before we can talk about ambitious entrepreneurship, we should first define what is meant with entrepreneurship. This is what we did in Chapter 1. Entrepreneurship includes two broad interpretations: an occupational and a behavioural one (Davidsson, 2004; Stam, 2008; Sternberg & Wennekers, 2005). The occupational interpretation refers to the phenomenon that some people, rather than working for somebody else under an employment contract, strike out on their own and become self-employed. This might be labelled as "self-sufficient entrepreneurship". The behavioural interpretation refers to the development and renewal of any society, economy or organization, which is based on micro-level actors who take initiative and make change happen. This closely connects to the definition of Shane

and Venkataraman (2000) of entrepreneurship as the identification, evaluation and pursuit of entrepreneurial opportunities (i.e., the five types of Schumpeterian innovation). Definitions 1 and 2 in Chapter 1 relate to this perspective. The context of this behaviour is not limited to a situation in which ownership and management are bundled (like in self-employment), but also includes entrepreneurial behaviour by employees in established organizations, and might also take place in the public sector. This is why we reviewed the literature on intrapreneurship in Chapter 3.

C – From entrepreneurship to entrepreneurship with the ambition to create value. Not all entrepreneurs are ambitious. In effect, many are not. This is clear from the many self-employed who simply want to be self-sufficient, without any ambition to grow or to be innovative. In contrast to football coaches, who always have the intention to win a game, entrepreneurs often have no intention to grow their business. This growth intention, or ambition, is an empirical indication of value creation beyond self-sufficiency. The central transition here concerns the shift from entrepreneurship without to entrepreneurship with the ambition to create value beyond self-sufficiency. In Chapter 4 and Chapter 5, we therefore reviewed the literature on entrepreneurial growth ambition.

D – From high-value entrepreneurship ambition to high value entrepreneurship realization. Key here is to define what is meant by "value". After all, the revealed effect of entry into entrepreneurship might be good or bad, or relatively neutral, depending on the stakeholders involved. Effects can only be qualified as "good" when some (new) value is created or "bad" when value is destructed. Some authors in the field of entrepreneurship studies define entrepreneurship as being

"new value creation" (Bruyat & Julien, 2000; Fayolle 2007), while others do not assume entrepreneurship to be "productive", but leave open the possibility of entrepreneurship being "destructive", or just "unproductive" (Baumol, 1990). Destructive and unproductive entrepreneurship can have two faces: rent-seeking or self-sufficient entrepreneurship. Rent-seeking has a rather negative connotation, in that it involves rational individual behaviour to reallocate resources for self-enrichment. Self-sufficient entrepreneurship has a more neutral, and sometimes even positive, connotation: it means that individuals are able to earn a living – and, in more extreme circumstances, that they are able to reduce poverty. In addition, entrepreneurs *with* value ambition can be unsuccessful in realizing value creation ("lingering entrepreneurship"), which would still qualify them as (unintended) unproductive entrepreneurs. There are multiple reasons for why the intended value creation is not realized – for example, due to a lack of skills of the entrepreneur and capabilities of the firm, and external constraints in the acquisition of resources (finance, personnel, supplies, et cetera) and insufficient market demand. An operational definition of value realization in the context of ambitious entrepreneurship is the following: "someone who starts a new firm and expands it". This operational definition has been central in Chapter 6, in which we reviewed the literature on entrepreneurial (employment) growth realization, focusing on individual and firm-level determinants.

The transitions in the model of ambitious and high-value generating entrepreneurship, however, are not only affected by individual-level and firm-level factors. The broader environment is also likely to play an important role in these transitions, and these transitions can also be measure on the national level, next to the individual level. In Chapter 5 and Chapter 7 we reviewed the findings from the Global

Entrepreneurship Monitor, and the recent literature on institutions and entrepreneurship has been reviewed in Chapter 7 and Chapter 8.

All this together led to an ambitious future research agenda, presented in Chapter 8, and a tentative list of policy directions, introduced in Chapter 9. It is our hope that this will prove to be a source of inspiration, for scholars and policymakers alike, to work further on the intriguing and very important topic of ambitious entrepreneurship.

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COLOFON

Uitgave van de Vlaamse Raad voor Wetenschap en Innovatie, januari 2012

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REEDS VERSCHENEN:

Studiereeks 1: Het ontwikkelen van een deflator voor O&O-uitgaven

Studiereeks 2: Wetenschappelijk Onderzoek: Tussen sturen en stuwen. Acta van het colloquium

Studiereeks 3: O&O-bestedingen van de Vlaamse Universiteiten

Studiereeks 4: Wetenschappelijk onderzoek en de genderproblematiek

Studiereeks 5: Biotechnologische uitvindingen, octrooien en informed consent

Studiereeks 6: Perspectieven uitgestroomde wetenschappers op de arbeidsmarkt

Studiereeks 7: De doctoraatsopleidingen aan de Vlaamse Universiteiten

Studiereeks 8: Het 'grote' begrotingsadvies. Wetenschaps- en technologisch innovatiebeleid 2002

Studiereeks 9: Wetenschappers: luxe of noodzaak?

Studiereeks 10: Samenwerking tussen kennisinstellingen en bedrijven inzake onderzoek(sresultaten): intellectuele eigendomsrechten, conflicten en interfaces

Studiereeks 11: De chemische industrie in Vlaanderen

Studiereeks 12: De voedingsindustrie in Vlaanderen

Studiereeks 13: Wetenschap en innovatie in Vlaanderen 2004 - 2010. Voorstellen voor een strategisch beleid

Studiereeks 14: Vlaams wetenschappelijk onderzoek en Science sharing

Studiereeks 15: Doctoreren aan Vlaamse universiteiten (1991–2002)

Studiereeks 16: Samenwerking universiteiten, hogescholen, onderzoeksinstellingen, intermediairen en bedrijven

Studiereeks 17: De Vlaamse deelname aan ruimte- en ruimtevaartonderzoek (1997–2003)

Studiereeks 18: Technologie en innovatie in Vlaanderen: Prioriteiten

Studiereeks 19: De Vlaamse deelname aan grote internationale onderzoeksinfrastructuur

Studiereeks 20: De uitbouw van het translationeel onderzoek

Studiereeks 21: Onderwijs: kiem voor onderzoek en innovatie

Studiereeks 22: Naar waarde geschat. Valorisatie van onderzoek in de humane en sociale wetenschappen

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