

Contributions of home-based businesses to regional economic development

Dr Calvin Wang

*Small & Medium Enterprise Research Centre,
School of Management, Edith Cowan University, Perth, Australia*

Email: c.wang@ecu.edu.au

Professor Beth Walker

*Small & Medium Enterprise Research Centre,
School of Management, Edith Cowan University, Perth, Australia*

Email: elizabeth.walker@ecu.edu.au

Dr Janice Redmond

*Small & Medium Enterprise Research Centre,
School of Management, Edith Cowan University, Perth, Australia*

Email: j.redmond@ecu.edu.au

Professor John Breen

*Small Business Research Unit,
Faculty of Business & Law, Victoria University, Melbourne, Australia*

Email: john.breen@vu.edu.au

Contributions of home-based businesses to regional economic development

ABSTRACT

Home-based businesses (HBBs) are the most dominant form of enterprise and the fastest growing business segment in most Western economies. HBBs have raised significant government interest based on their potential to deliver economic development and growth for the communities that they operate in. While international knowledge of the home-based sector is growing in the areas of HBB occurrence, operator characteristics and business activities, there is limited focus on HBBs operating within a regional context even though HBBs are thought to be more common outside urban areas. This paper presents results from a West Australian study that explored the profile of regionally located HBBs and examined the economic contributions that these businesses made to their geographic areas.

Keywords: Characteristics of entrepreneurs, Entrepreneurship and economic development, Self-employment, owner/ managers, Small and medium sized enterprises

In recent times, businesses that operate predominantly from a home base (i.e. home-based businesses or HBBs) have raised significant interest particularly from governments in relation to their economic development agendas. This increased interest is predicated on the sheer number of HBBs. In Australia for example, currently available data shows that home-based businesses (HBBs) account for more than two-thirds of all small businesses (Australian Bureau of Statistics 2005), and approximately half of all small businesses in the UK and US (Beale 2004; Dwelly et al. 2005; Enterprise Nation 2008). HBBs are also the fastest growing economic sector in these (and other) countries where it is conservatively estimated that a business operates in approximately 1 in 10 households (Dwelly et al. 2005; Earles et al. 2006; Pratt 2000). On this basis, there is clearly considerable potential for HBBs to deliver significant economic development and growth for the communities that they operate in.

While international knowledge of the home-based sector is growing, particularly in the areas of HBB occurrence, operator characteristics and business activities, there is limited focus on HBBs operating within a regional context even though HBBs are thought to be more common outside urban areas (Dwelly et al. 2005). To address the gap, this paper presents results from a study in regional Western Australia to answer the following research question, *what is the profile of regionally located HBBs?* Since interest in the HBB sector is primarily centred on their economic potential, the following research question is also

posited, *do regional HBBs make a significant economic contribution to their geographic area?* To set the context in which these research questions are explored and answered, the challenges that regional areas face and the focus on the small business sector as a reviver of economic fortunes in these areas is discussed before the methods and results of the research are outlined.

THE CHALLENGES OF REGIONAL ECONOMIC DEVELOPMENT

In Australia and elsewhere, there has been a rise in interest in regional economic development as a result of significant economic and social challenges confronting regional areas. For example, regional areas are increasingly characterised by high unemployment but contradictorily, also skills shortages; limited access to resources; under-developed infrastructure; declining economic and investment activity; lower average household incomes; disappearing communities from the out-migration particularly of young people to major cities; and in some cases, an ageing population from an in-migration of retirees (Banks 2000; Nolan 2003; Smallbone 2008; Stimson et al. 2001). The situation is compounded by unequal vulnerability to these problems across regional areas due to differences in geography, resources and other local conditions (Commonwealth of Australia 2003). However, regional economic development is most an issue when growth and prosperity is compared between regional areas and that of major metropolitan centres or capital city areas. Although there are variations and exceptions, it is generally accepted that a rich-poor divide exists with regional areas typically seen as being disadvantaged compared to their city cousins (Lloyd et al. 2001; Smith 2004; Stimson 2001).

Bridging the rich-poor divide is a challenge because, in contrast to major metropolitan/city areas, regional areas are more affected by inherent locational factors and conditions as a result of low connectivity and isolation (Alam et al. 2007; MacGregor and Vrazalic 2005). Regional economic activity revolves primarily around local markets and these are often characterised by smallness and lower per capita incomes (Smallbone 2008). In many instances, regional enterprises (compared to non-regional ones) also have lower access to financial, technical and human resources (MacGregor and Vrazalic 2005; North and

Smallbone 2006). These factors reduce the opportunities for economic development and perpetuate metropolitan or capital city area advantages and regional area disadvantages (Lawson and Dwyer 2002), thus limiting the opportunities for governments to alleviate inequalities arising from geography (Naude et al. 2008). However, opportunities to support regional economic development do exist and some of these involve having a dynamic and active small business sector.

THE IMPORTANCE OF SMALL BUSINESSES TO REGIONAL DEVELOPMENT

The principal issue in regional economic development is job creation (Black et al. 2000) and recent attention has focused on the small business sector in general as a reviver of economic fortunes. Across the European Union for example, small businesses are viewed as the ‘catalyst for regional development’ (European Commission 2004). Empirical evidence exploring the link between small business and regional prosperity shows a positive relationship whereby higher regional entrepreneurial activity (measured through new small business formation and start-up rates) correlates with higher levels of job creation and higher levels of economic growth (Benneworth 2004; Caree and Thurik 2008; Fritsch and Mueller 2007; Smallbone 2008). All things equal, the formation of new businesses create employment for owners and potentially others which add to the total stock of jobs. These businesses also develop new capacity, bring new products and services, as well as add diversity to local areas (van Stel and Storey 2004).

On the other hand, new enterprises pose a threat to incumbents and, in the Schumpeterian tradition, dislodge or crowd out those that are inefficient and incentivise remaining businesses to become more efficient and to innovate (Acs and Storey 2004; Fritsch and Mueller 2004). Over time, these activities can foster an entrepreneurial climate whereby new businesses are formed and a growth cycle of job creation, increased capacity and efficiency, and innovation re-establishes at ever increasing rates (Dahlstrand 2007; Fritsch 2008; Wong et al. 2005). Although growth cycles occur generally as a result of entrepreneurial activity, it is particularly accentuated in regional areas because businesses tend to be geographically bounded. On this basis, the thrust of many regional economic imperatives is focused on promoting small

business creation and encouraging entrepreneurship (Audretsch 2007; Gilbert et al. 2004). Vital to this objective is a better understanding, not just of the operating conditions which are generally well recognised, but also of the nature and dynamics of small businesses in regional areas. Within the small business sector, a significant proportion is made up of home-based businesses (HBBs).

HOME-BASED BUSINESSES

The defining characteristic of HBBs is the use of the family home instead of premises such as shops, offices, factories, warehouses and other commercial real estate as a base for business. In recent times, HBBs have experienced a growth both in Australia and overseas due to a number of global change factors. For example, structural shifts in the developed world from manufacturing toward service and knowledge bases have combined to enhance the viability of, and range of opportunities for, self-employment (Bryant 2000; Dwelly et al. 2005; Phillips 2002). At the same time, advances in information and communication technology (ICT) have increased the accessibility and affordability of mobile phones, computers, internet connectivity, software applications and other mobile business-use tools, thus greatly enabling the home and mobile office (Walker 2003).

Socio-cultural changes have also played a part in the HBB growth phenomenon. The first of these is the upsurge of female entrepreneurship and the emergence of a diverse group of new business owners different to the traditional male business owner (Berke 2003; Culkin and Smith 2000; Loscocco and Smith-Hunter 2004; Still and Walker 2006). Other changes in modern society include the increased prevalence and necessity of two-income families (Edwards and Field-Hendrey 2002), and a growing push for better work-life balance (Culkin and Smith 2000). These developments have led to a focus on the home business as an attractive alternative to either supplement or replace paid employment since, compared to commercial business sites, the home is a more attractive start-up option given its lower set-up overheads and on-going operating expenses (Brown & Muske, 2000; Langdon, 2001; Stanger, 2000). HBBs also provide greater convenience and flexibility in operations (Bach 1997; Berke 2003; Smith

2000), which are particularly appealing to women, and lower psychological stresses from working in a comfortable and familiar home environment (Walker 2002). In effect, these advantages allow HBBs to act as micro incubators, enabling nascent entrepreneurs to build up their businesses slowly through experimentation and in many cases, while continuing initially to be employed elsewhere (Earles et al. 2006; Phillips 2002; Stanger 2000). At a broader level, HBBs as a distinct form of small business have considerable potential to contribute to economic growth. Home-based business operators typically prefer to trade locally and where practical, generally source their inputs in and around the locality where they are based, employ locals to work in the business, and offer the goods and services they produce back into their local markets (Stanger 2000; Walker et al. 2002). Such localised HBB activity reduces economic leakages and the multiplier effect from this has been shown to increase employment, gross sales and total earnings by 20%, 12% and 15% respectively in local communities (Rowe et al. 1999). Additionally, the collective presence of HBBs increases the economic diversity within an area and makes them an attractive vehicle for fostering sustainable local communities (Walker et al. 2004). Furthermore, HBBs can also assist in the development of social capital through the progressing of a sense of community, thereby enhancing residents' attachment to an area (Cox 1999; McKenzie 2003; Winter 2000).

In relation to regional areas, there have been few dedicated studies which have looked explicitly at the contributions that HBBs can make within the context of regional economic development. The information that is available is generally sparse, "piecemeal" and lacks "clarity and comparability" (Dwelly et al. 2005, p.16). In Australia, a number of surveys on the home-based sector have been conducted by local governments in recent years. Although some of these have been regionally situated, on the whole they have been commissioned works focused on describing HBBs in the study areas rather than on developing a broad understanding of their economic impact on a region (see for example: Bycroft et al. 2003; Care Consulting 2002; Hi-Tech Marketing Services 1998; Hi-Tech Marketing Services 2003; Melton Shire Council and Wyndham City Council 2001; Small & Medium Enterprise Research Centre 2002; Walker 2002). Consequently, the phenomenon of regionally located HBBs lacks a foundation for which a

coherent approach may be developed that links HBB as a sector with the study of regional economic development. The aim of this paper is therefore to develop an understanding of the nature of regional HBBs, and explore the economic contributions of HBBs to regional areas.

STUDY OVERVIEW

Results presented in this paper are based on key findings from a national HBB research project conducted in Australia. The study was carried out across two states – Western Australia (WA) and Victoria – in collaboration with the respective state governments. The work was undertaken to advance knowledge of HBBs within the states and across the nation by providing an understanding of the nature (e.g., industry, size, location, longevity, turnover, operator demographics, etc.); and dynamics (e.g., motivation of operators, growth attitudes and experiences of operators, business performance drivers and barriers, etc.) of HBBs. This paper only presents findings on regional businesses from the WA component of the project.

Method

The study utilised a mixed methods approach and combined a survey of HBBs as the primary data collection effort, with one-on-one interviews with operators to complement the survey. This dual approach expands the study by adding scope and breadth to the overall results (Creswell 1994). The study sample was identified through government business support agencies and comprised HBB operators who had previously accessed business assistance. A questionnaire was sent to all operators and participation was anonymous and voluntary. Of the 626 responses, 73% were from HBBs located in metropolitan Perth and 27% were from regional areas. The ABS classification of ‘regional’ as being “areas outside of large metropolitan centres” (Australian Bureau of Statistics 2006, p.2) was applied, which in WA, subsumes all locations outside the greater Perth metropolitan area. Results pertaining to the latter group (n = 168) are reported below. Where appropriate, comparisons are raised between the present results and relevant Australian Bureau of Statistics (ABS) data on Australian HBBs and small businesses.

Results

Research Question 1: What is the profile of regionally located HBBs? The demographic and business profiles of regional HBB operators and businesses are presented in Tables 1 and 2. In relation to typology, two broad groups of HBBs are generally identified in Australia: 'at home' businesses for which the majority of work is carried out in the home or on the residential property of the operator; and, 'from home' businesses which have no registered premises other than the operator's home (Australian Bureau of Statistics 2005). Overall, there were more 'at home' (60%) than 'from home' (40%) enterprises, and more female (55%) than male (45%) operators in the regions. The percentage of 'at home' regional operators was twice that of the wider Australian HBB sector (31%) (Australian Bureau of Statistics 2005), reflecting perhaps the characteristics of operational conditions in regional areas. For example, the presence of a significantly higher percentage of female operators may contribute to a larger number of *in situ* businesses since many female operated regional enterprises are often based on diversifying farm and other local commodities produced by way of value-adding (e.g. country craft activities, or by running traditional bed and breakfasts on their properties) (Strategic Economic Solutions 2004).

TABLE 1 HERE.

The gender results are significantly different to those reported in national statistics which typically record a greater percentage of males operating in both the Australian HBB sector (66%) and the wider small business sector (68%) (Australian Bureau of Statistics 2005). The mean age of operators was 46 years which falls within the 30-50 years age band that the majority of small business operators in Australia belong to (Australian Bureau of Statistics 2005). As a group, HBB operators were typically more educated compared to the broader Australian business sector; for example 30% of HBBs were tertiary qualified vs. 23% of all business operators; 37% of female HBB operators were tertiary qualified vs. 29% of all female business operators (Australian Bureau of Statistics 2008a). The average number of years of operation was eight for the businesses surveyed which is in the upper range of years (up to 10yrs) that about 70% of total small businesses (Australian Bureau of Statistics 2005) and 60% of all businesses operate to nationally

(Australian Bureau of Statistics 2008a). Additional analysis showed a further 10% of the study's businesses had been trading for over 20 years.

TABLE 2 HERE.

No particular industry dominated although about one in five regional HBBs operated in the construction and trades (19%), and agriculture, mining and transport (18%) sectors. Notwithstanding, personal services were an important category following the broad transition of the Australian economy towards the services sector, and the general nature of HBBs which lends itself to service-type enterprises.

The majority of HBBs were full-time businesses and the businesses were the primary source of personal and household income for over 70% of operators. For these businesses, the median annual turnover was \$100,001 to \$150,000 although almost 30% generated turnovers in excess of \$250,000. This compares with the national average of 33% for all businesses with turnovers between \$200,000 to \$2million (Australian Bureau of Statistics 2007). At the lower range, about 20% of regional HBBs turned over less than \$50,000 which approximates the performance of the wider business sector.

In relation to employment generation, the average HBB employed two full-time employees (including the operator) and/or three to four part-time workers. This also makes most HBBs micro businesses (less than 5 employees) (Australian Bureau of Statistics 2005). Compared to HBBs nationally where 69% are non-employing, 28% employ between 1 and 4 people, and 3% employ 5 to 19 people (Australian Bureau of Statistics 2005), regional HBBs appear to provide good employment opportunities. Notwithstanding, the composition of employees in regional HBBs is more likely to comprise family members such as spouses or partners (51%), and children and other relatives (13%). Even so, over a third of HBBs (36%) generated employment for non-family members.

In answer to the first research question, the above profile points to regional HBBs as 'serious' enterprises that share operational similarities with businesses in the broader small business sector. Although more

accurately described as micro-businesses, regional HBBs nevertheless still provide both full- and part-time employment opportunities. In terms of operator characteristics however, the gender and education profiles of regional HBB operators appear to be different to the broader small business sector with more female entrepreneurs represented and operators better educated/qualified. Additionally, although the longevity of operators falls within the average range of years of the broader business sector, regional operators tend towards the upper range. The second research question looks at the economic contribution of HBBs.

Research Question 2: Do regional HBBs make a significant economic contribution to their geographic area? This was examined through a study of the business growth activities, performance results and business aspirations. Four measures were used to determine growth activities which related to ‘increases in the last two years’ in turnover, investment in the business, new products and services offered by the business (used by the Australian Bureau of Statistics (2008b) as a proxy indicator of innovation), and employee numbers. From Table 3, more than half of all operators (54%) reported significant positive changes in their turnovers and business investments (principally in equipment and technology). Just under 50% reported adding to their list of products and services which compares favourably against national averages of 19% of all businesses that actively attempt to introduce new products/services (Australian Bureau of Statistics 2008b); 28% of operators also reported increases in the number of people they employed.

TABLE 3 HERE.

Comparisons with results from the broader national project (Walker et al. 2007) showed little significant differences overall, suggesting that regional HBBs can be as operationally dynamic as the broader HBB sector operating in Australia.

TABLE 4 HERE.

The final table reports on the business aspirations of the operators. Aspirations are generally indicative of potential future growth and on-going economic activity, and as shown in Table 4, were generally modest

for the majority of the operators in the study. From the table, substantially more operators had aspirations for 'moderate' than 'significant' growth (56% vs. 14% respectively), and almost one-third reported intentions to deliberately stay 'small and manageable' (30%). On this basis, two groups of HBB operators may be identified based on Storey's (1994) classification of small business operators; namely, 'flyers' (also '10-percenters') representing the top 10% of operators who aspire to grow significantly, and 'trundlers' comprising those for whom growth may not be an important pursuit. The identification of 'flyers' or '10-percenters' within the HBB sector is important since these are the operators seen to have the greatest positive impacts on the creation of new jobs, increased productivity and introduction of innovation (Storey 1996, 1997, 1998, 1999).

Overall, results in this section suggest that the answer to the second research question is positive.

Regional HBBs can make important economic contributions to regional areas on the basis of the dynamic levels of investments in equipment, technology and new products and services (innovation), improvements in performance and employment generation. Additionally, their activity levels in these areas appear to be highly comparable to the broader HBB sector. The implication of this is considered in the next section.

DISCUSSION AND CONCLUSION

The profile of home-based businesses in regional areas suggests that these are enterprises with trading longevity and good earnings potential as evident in turnover figures. Results show that HBBs are important as primary sources of regional household incomes and are operated by educated and qualified individuals. Although the majority of operators have modest long-term goals for business growth, many of the businesses are still dynamic, showing significant and recent improvements in key operational areas such as turnover and the number of products and services offered, as well as significant and recent increases in people, equipment and technological investments. The profile further showed that while regional HBBs operated in a number of traditional regional sectors such as agriculture, mining and

transport, they were also involved across the constructions and trades, professional, business and IT, and personal/lifestyle sectors.

With reference to the second research question on the economic contributions of regional HBBs to regional areas, the findings showed that at an individual level, HBBs provide relatively long-term livelihoods for regional operators as well as employment to family and non-family members. At a community level, HBBs supply goods and services but more significantly, they add to the range of consumption choices available regionally, and help diversify the economic bases of regional industry. In relation to wealth creation, the collective business turnovers represent a direct measure of the value of wealth regional HBBs generate locally. Additionally, the growth and performance results of HBBs in this study suggest that they can be important local sources of business investment and innovation, both of which are tied to long-term regional prosperity. The longevity of many of the regional HBBs is a key element to the sustainability of regional communities. When combined with the fact that many of these HBBs were generating significant income (most of which stays in the community), the case for providing specific and sustained HBB support in regional areas is strongly supported.

Regarding employment, although regional HBBs are effectively micro-businesses, they nevertheless provide job opportunities for family and non-family members. The incidence of family employment in regional HBBs is also a feature that has possible benefits to local communities especially where this leads to the creation of family enterprises. For example, family enterprises, compared to non-family firms, can be characteristically more stable, resilient and financially successful (Allio 2004; Miller and Le Breton-Miller 2003; Sharma and Irving 2005). This often occurs because family participation engenders a greater vested interest in the business and determination to ensure the long-term viability of operations, especially if there is a strong desire to see the business passed on to successive generations. In addition to ensuring the continuity of local production, this can help strengthen regional economies given the positive links between a strong business presence and regional prosperity (Baptista et al. 2008). A further point

regarding employment is that job opportunities for women are often more limited in regional than in metropolitan areas (Merrett and Cruidl 2000; Warren-Smith and Jackson 2004). However, such opportunities are vital to regional sustainability since women's work force participation helps diversify and supplement incomes from farming and other region-based activities that are highly cyclical or vulnerable to externalities (Houghton and Strong 2004; Merrett and Cruidl 2000). Results from the present study suggest that HBBs are a vehicle through which entrepreneurial women can start their own businesses as a means to effectively overcome regional employment limitations. Aldrich and Cliff (2003) argued that a crucial aspect of entrepreneurship was the recognition and exploitation of business opportunities. In relation to the latter, our findings in this section suggest that HBBs are important for both family and female entrepreneurship. For researchers, the 'HBB factor' provides opportunities for studying fundamental entrepreneurial processes such as opportunity recognition, venture creation and resource mobilisation (Aldrich and Cliff 2003), particularly in regional areas with distinct entrepreneurial challenges.

Overall, the finding that regional HBBs exhibit a similar dynamism to others in the broader HBB sector suggests that businesses operated from a home base have the potential to contribute to regional economic development in the same way that HBBs are respected for their contributions to urban areas. Additionally, this potential extends beyond the more obvious and direct contributions of providing goods and services, employment and business investment by way of broader effects on diversity, and hence resilience of regional economies. However, regional HBBs have thus far operated without specific support in spite of existing regional development strategies being focused on encouraging entrepreneurship and small business creation. This study provides a positive message for governments that HBBs can be an important component of strategies to respond to the challenges that regional areas are increasingly confronted with.

While this paper has provided insights into the regional HBB sector, it should be noted that the timing of the study coincided with a period of strong economic growth which benefited many regional areas and

may have contributed in some part to the positive nature of business activities reported by HBBs in this study. Accordingly, comparative international research could be conducted to model the nature and extent of regional HBB contributions (economic, social and community) vis-à-vis non-regional HBBs and perhaps more broadly, with other small businesses. Such knowledge could inform policy makers and assist in the formulation of regional economic development strategies.

REFERENCES

- Acs Z & Storey D (2004) Introduction: Entrepreneurship and economic development, *Regional Studies* 38(8): 871-877.
- Alam Q Johnston F & Miller S (2007) Industry partnerships in regional small and medium enterprises. *Monash Business Review* 3(2): 1-12.
- Aldrich H & Cliff J (2003) The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing* 18: 573-596.
- Allio M (2004) Family Business: Their virtues vices and strategic path, *Strategy and Leadership* 32(4): 24-34.
- Audretsch D (2007) From small business promotion to creating an entrepreneurial society, *CESifo Forum* 8(2): 3-6.
- Australian Bureau of Statistics (2005) *Characteristics of small business*, Canberra Australia: Commonwealth Government of Australia.
- Australian Bureau of Statistics (2006) *Regional policy and research in Australia - The statistical dimension Information development plan for rural and regional statistics*, Canberra: Commonwealth Government of Australia.
- Australian Bureau of Statistics (2007) *Counts of Australian businesses including entries and exits*, Canberra: Commonwealth Government of Australia.
- Australian Bureau of Statistics (2008a) *Counts of Australian business operators: 2006 to 2007*, Canberra: Commonwealth of Australia.
- Australian Bureau of Statistics (2008b) *Selected characteristics of Australian businesses 2005-06*, Canberra: Commonwealth Government of Australia.
- Bach AL (1997) *Home-based work space: Satisfactions of North Dakota women entrepreneurs*, Blacksburg: Virginia Polytechnic Institute and State University.

- Banks, G (2000) *Meeting the challenge of change in regional Australia*. In Renaissance of the regions - A Symposium of the Institute of Public Administration Australia. Melbourne, VIC.
- Baptista RV & Madruga P (2008) Entrepreneurship regional development and job creation: The case of Portugal, *Small Business Economics* 30(1): 49-58.
- Beale H (2004) *Home-based business and government regulation, Report to the Small Business Administration*, Washington DC: Office of Advocacy US Government.
- Benneworth P (2004) In what sense regional development? Entrepreneurship underdevelopment and strong tradition in the periphery, *Entrepreneurship & Regional Development* 16(6): 439-458.
- Berke D (2003) Coming home again: The challenges and rewards of home-based self-employment, *Journal of Family Issues* 24(4): 513-546.
- Black AJ Duff S Suggers P Baines Jennings A & Bowen P (2000) *Rural communities and rural social issues: Priorities for research*, Kingston: Rural Industries Research and Development Corporation.
- Bryant S (2000) At home on the electronic frontier: Work gender and the information highway, *New Technology Work and Employment* 15(1): 19-33.
- Bycroft P McGregor K & Wilson F (2003) *Research current statistics - Noosa industries extract report*, Noosa Queensland.
- Care Consulting (2002) *Bunbury Wellington Economic Alliance home-based business study*, Bunbury
- Caree M & Thurik A (2008) The lag structure of the impact of business ownership on economic performance in OECD countries, *Small Business Economics* 30(1): 101-110.
- Commonwealth of Australia (2003) *Government interventions in pursuit of regional development: Learning from experience*, Canberra: Department of Transport and Regional Services.
- Cox E (1999) Can social capital make societies more civil?, *Australian Planner* 36(2): 75-78.
- Creswell JW (1994) *Research design Qualitative & quantitative approaches*, London: Sage Publications.
- Culkin N & Smith D (2000) An emotional business: A guide to understanding the motivations of small business decision takers, *Qualitative Market Research* 3(3): 145-157.

- Dahlstrand A (2007) Technology-based entrepreneurship and regional development: The case of Sweden *European Business Review*, 19(5): 373-386.
- Dwelly T Maguire K & Truscott F (2005) *Under the radar: Tracking and supporting rural home based business A report for the Commission for Rural Communities*, Live Work Network London.
- Earles W Lynn R & Pierce-Lyons R (2006) *Characteristics of home-based businesses: Essential background for future research*, 51st International Council for Small Business World Conference Melbourne.
- Edwards LN & Field-Hendrey E (2002) Home-based Work and Women's Labor Force Decisions, *Journal of Labor Economics* 20(1): 170-200.
- Enterprise Nation (2008) *Home business report 2008* Shrewsbury, SY: Enterprise Nation.
- European Commission (2004) *SMEs in Europe 2003*, Luxembourg: Observatory of European SMEs
- Fritsch M (2008) How does new business formation affect regional development? Introduction to the special, *Small Business Economics* 30 (1): 1-14.
- Fritsch M & Mueller P (2004) Effects of new business formation on regional development over time, *Regional Studies* 38(8): 961-975.
- Fritsch M & Mueller P (2007) The persistence of regional new business formation-activity over time - assessing the potential of policy promotion program, *Journal of Evolutionary Economics* 17(3): 299-315.
- Gilbert B Audretsch D & McDougall P (2004) The emergence of entrepreneurship policy, *Small Business Economics* 22(3/4): 313-323.
- Hi-Tech Marketing Services (1998) *Research on home-based businesses in the South East Region, Report prepared for the City of Casey, Victoria*.
- Hi-Tech Marketing Services (2003) *Research on home-based businesses in Mitchell Shire, Report prepared for Mitchell Shire Council, Victoria*.
- Houghton K & Strong P (2004) *Women in business in rural and remote Australia: Growing regional economies*. Barton, ACT: Rural Industries Research and Development Corporation.

- Lawson J & Dwyer J (2002) *Labour market adjustment in regional Australia*, Sydney: Reserve Bank of Australia.
- Lloyd R Harding A & Hellwig O (2001) Regional divide? A study of income inequality in Australia, *Sustaining Regions* 1(October): 17-30.
- Loscocco K & Smith-Hunter A (2004) Women home-based business owners: Insights from comparative analyses, *Women in Management Review* 19(3): 164-173.
- MacGregor RC & Vrazalic L (2005) A basic model of electronic commerce adoption barriers: A study of regional small businesses in Sweden and Australia, *Journal of Small Business and Enterprise Development* 12(4): 510-527.
- McKenzie F (2003) *Economic restructuring and regional development in the central wheatbelt of Western Australia*, Perth: University of Western Australia.
- Melton Shire Council & Wyndham City Council (2001) *Outer Western home-based employment project*, Victoria.
- Merrett CD & Cruidl JJ (2000) Small business ownership in Illinois: The effect of gender and location on entrepreneurial success, *Professional Geographer* 52(3): 425-436.
- Miller D & Le Breton-Miller I (2003) Challenge versus advantage in family business, *Strategic Organization* 1(1): 127-134.
- Naude WT Wood GE & Meintjies A (2008) Regional determinants of entrepreneurial start-ups in a developing country, *Entrepreneurship & Regional Development* 20(2): 111-124.
- Nolan A (2003) *Entrepreneurship and local economic development: Policy innovations in industrialized countries*, Paris: OECD.
- North D & Smallbone D (2006) Developing entrepreneurship and enterprise in Europe's peripheral rural areas: Some issues facing policy-makers, *European Planning Studies* 14(1): 41-60.
- Phillips B (2002) Home-based firms e-commerce and high-technology small firms: Are they related?, *Economic Development Quarterly* 16(1): 39-48.

- Pratt JH (2000) *Homebased business: The hidden economy*, Small Business Research Summary Dallas Texas: United States Small Business Administration.
- Rowe BR Haynes GW & Stafford K (1999) The contribution of home-based business income to rural and urban economies, *Economic Development Quarterly* 13(1): 66-77.
- Sharma P & Irving P (2005) Four bases of family business successor commitment: Antecedents and consequences, *Entrepreneurship Theory and Practice* 29(1): 13-33.
- Small & Medium Enterprise Research Centre (2002) *Home-based businesses in the City of Wanneroo*, Perth: Edith Cowan University.
- Smallbone D (2008) *Fostering entrepreneurship in rural areas*, Small Enterprise Association of Australia and New Zealand Conference Sydney.
- Smith C (2004) For richer or poorer: Recent trends in Australia's regional income dynamics. *Australasian Journal of Regional Studies* 10(2): 195-223.
- Smith CR (2000) Managing work and family in small copreneurial business: An Australian study, *Women in Management Review* 15(5/6): 283-289.
- Stanger A (2000) *Home-based business marginality: A review of home-based business performance and its determinants*, School of Commerce research paper Series (00-17), Adelaide: Flinders University of South Australia.
- Still L & Walker E (2006) The self-employed woman owner and her business: An Australian Profile, *Women in Management Review* 21(4): 294-310.
- Stimson R (2001) Dividing societies: The socio-political spatial implications of restructuring in Australia, *Australian Geographical Studies* 39(2): 198-216.
- Stimson R Baum S Mullins P & O'Conner K (2001) Australia's regional cities and towns: Modelling community opportunity and vulnerability, *Australasian Journal of Regional Studies* 7(1): 23-62.
- Storey DJ (1994) *Understanding the small business sector*, London: Routledge.
- Storey DJ (1996) *The ten percenters (First report): Fast growing SMEs in Great Britain*, London: Deloitte & Touche.

- Storey DJ (1997) *The ten percenters (Second report): Fast growing SMEs in Great Britain*, London: Deloitte & Touche.
- Storey DJ (1998) *The ten percenters (Third report): Fast growing SMEs in Great Britain*, London: Deloitte & Touche.
- Storey DJ (1999) *The ten percenters (Fourth report): Fast growing SMEs in Great Britain*, London: Deloitte & Touche.
- Strategic Economic Solutions (2004) *Women in business in rural and remote Australia: Growing regional economies A report for the Rural Industries Research and Development Corporation*, Kingston ACT: RIRDC.
- van Stel A & Storey D (2004) The link between firm births and job creation: Is there a Upas tree effect?, *Regional Studies* 38(8): 893-909.
- Walker E (2002) *A profile of the home-based business sector within the City of Swan*, Perth: Small and Medium Enterprise Research Centre Edith Cowan University.
- Walker E (2003) Home-based businesses: Setting straight the urban myths, *Small Enterprise Research* 11(2): 35-48.
- Walker E Wang C Redmond J & Breen J (2007) *A survey of home-based businesses in Australia: Combined findings from Western Australia and Victoria. A report to the Small Business Development Corporation*, Perth: Small & Medium Enterprise Research Centre Edith Cowan University.
- Walker E Weigall F & Horgan M (2002) *The role of local government in developing a home based business strategy*, 15th SEAANZ Conference Adelaide Australia.
- Walker E Weigall F & Horgan M (2004) *Home-based businesses as a policy issue*, 17th SEAANZ Conference Brisbane Australia.
- Warren-Smith I & Jackson C (2004) Women creating wealth through rural enterprise, *International Journal of Entrepreneurial Behaviour & Research* 10(6): 369-283.
- Winter I (2000) *Social capital and public policy in Australia*, Melbourne: Australian Institute of Family Studies.

Wong PK Ho YP & Autio E (2005) Entrepreneurship innovation and economic growth: Evidence from GEM data, *Small Business Economics* 24 (3): 335-350.

Table 1: Profile of Regional HBB Operators

Type of Operation	At Home: 60% From Home: 40%
Operator Gender	Male: 45% Female: 55%
Operator Age	Mean: 46 Years
Operator Education Level	Secondary: 30% Trade: 40% University: 30%
Working Hours	Mean: 40 Hrs/Week
Years in Operation	Mean: 8 Years Male Operator Mean: 10 years Female Operator Mean: 7 years

Table 2: Profile of Regional HBBs

Type of Business	Agriculture, Mining and Transport: 18% Construction and Trades: 19% IT Services: 6% Personal/Lifestyle Services: 7% Professional and Business Services: 13% Tourism: 13% Wholesale and Retail: 13% Other Services: 11%
HBB as a Primary Source of Income	<u>All HBBs: 71%</u> Male Operators: 80% Female Operators: 63%
Annual Turnover (AUD \$) (Includes only HBBs which are a primary source of income for operators)	Median Category: \$100,001 - \$150,000 <u>Dispersion</u> \$50,000 or less: 22% \$50,001 - \$100,000: 21% \$100,001 - \$150,000: 14% \$150,001 - \$250,000: 14% \$250,001 or more: 29%
Employees (including operator)	<u>Full-time</u> Mean: 1.8 <u>Part-time</u> Mean: 3.5 <u>Family Involvement</u> Spouse/Partner: 51% Children: 10% Other family: 3% No family involved: 36%

Table 3: Business Growth Activity Indication

Growth Indicator (Changes in last 2 years)	% Yes*
Invested significantly in equipment & technology	55
Significantly increased turnover	54
Increased number of products/services	47
Employed more staff	28
*Multiple counts possible, total greater than 100%	

Table 4: Business Aspirations of Operators

Business Aspirations	Percent
Stay small & manageable ('Trundlers')	30
Grow moderately	56
Grow significantly ('Flyers')	14
Total	100