

# How the state and private sector can partner to boost support to SMEs: Lessons from Chile & Malaysia

Stephen Timm

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## **Abbreviations**

ACCCIM Associated Chinese Chambers of Commerce and Industry of Malaysia

BEE Black Economic Empowerment (BEE)

Bn Billion

CGC Credit Guarantee Corporation (Malaysia)
CIP Cradle Investment Programme (Malaysia)

Codelco Corporación Nacional del Cobre de Chile (National Copper Corporation of Chile)

Corfo Corporación de Fomento de la Producción de Chile (Production Development Corporation of

Chile)

CCRIS Central credit reference information system (Malaysia)

CGTMSE Credit Guarantee Fund Trust for Micro and Small Enterprises (India)

CTOS Credit Tip-off System (Malaysia)

DAGS Direct Access Guarantee Scheme (Malaysia)

Dags Start-Up Direct Access Guarantee Scheme – Start-Up (Malaysia)

Direct BG Direct Bank Guarantee Scheme (Malaysia)

Dags-I Direct Access Guarantee Scheme-I (Malaysia)

FGS Flexi Guarantee Scheme (Malaysia)
FFS Franchise Financing Scheme (Malaysia)

Fogape Fondo de Garantia para la Pequeña Empresas or the Guarantee Fund for Small Business

GDP Gross domestic product

GEM Global Entrepreneurship Monitor

GTFS Green Technology Financing Scheme (Malaysia)

IASP International Association of Science Parks
ICT Information and communication technology
IDC Industrial Development Corporation (SA)

IPR Intellectual property rights

IPR Act Intellectual Property Rights from Publicly Financed Research and Development Act

IP Intellectual property
IT Information technology

Lavca Latin American Venture Capital

Mavcap Malaysia Venture Capital Management

MeDC Multimedia Development Corporation (Malaysia)

MIRC MCA (Malaysian Chinese Association) ICT Resource Centre

MSC Multimedia Super Corridor (Malaysia)

MSE Medium and Small Enterprise

MTDC Malaysia Technology Development Corporation

NBIA National Business Incubator Association
NINA National incubator Network Association

NIPMO National Intellectual Property Management Office (SA)

NPL Non-performing loan

R&D Research and development

RM Malaysian ringgit

Sabtia Southern African Business and Technology Incubation Association

SARS South African Revenue Service

SAVCA South African Venture Capital Association
SEDA Small Enterprise Development Agency (SA)

SEFA Small Enterprise Finance Agency (SA)
SME Small and medium-sized enterprise

SMTDC Soshanguve Manufacturing Technology Demonstration Centre (SA)

SIRIM Standard and Industrial Research Institute of Malaysia

TIA Technology Innovation Agency (SA)

TPM Technology Park Malaysia

THRIP (The) Technology and Human Resources for Industry Programme (SA)

UDD Universidad del Desarrollo (University of Development – Chile)

VC Venture capital

WTO World Trade Organisation

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# **Executive Summary**

For South Africa, the promotion of small businesses remains key to creating jobs and a more equitable economy. Evidence from Chile and Malaysia – both countries with similar emerging economies as South Africa – reveals that by partnering to provide finance and business support, the government and the private sector can boost support to small businesses. This report builds on key findings by this author in other emerging countries in a 2011 TIPS report, by the same author, titled "How South Africa can boost support to SMEs: Lessons from Brazil and India".

This report looks at how state and private sector can partner to:

- Provide incubation services.
- Improve access to finance through credit guarantees, the promotion of angel investment networks and venture capital.
- Promote innovation by attracting foreign entrepreneurs.

The report also considers e-procurement as an alternative to set-asides, when it comes to boosting state procurement from small and medium enterprises (henceforth SMEs).

## **Performance and policy**

Small, micro and medium enterprises make up 99% of all businesses in Chile and Malaysia, accounting for 741 430 such firms in Chile (in 2009) and 548 267 in Malaysia (in 2005). In Chile the sector accounts for 20% of gross domestic product (GDP) and 60% of jobs, while in Malaysia SMEs contribute 31% of the GDP and 56% of employment.

Figures on the number of small businesses in South Africa remain sketchy. While FinScope's 2010 South Africa Small Business Survey reveals that there are close to six million small businesses in the country, the Department of Trade and Industry's Annual Review of Small Business 2006-2008, held there to be 2.43 million small enterprises in 2007. Small and micro enterprises contribute between 27% and 34% of South Africa's GDP and for about 55% of all jobs.

The percentage of workers employed by small businesses in Malaysia and Chile is on the rise. In Chile the proportion of persons working in SMEs rose from 54.5% of employees in the February-April 2010 quarter to 56.4% in February-April 2011. Small firms also create the highest number of jobs in Chile. A 2011 study by the Research Division of Chile's Ministry of economy revealed that of the 262 430 new salaried jobs created in the February-April 2011 quarter compared to the same period in 2010, 90% were generated by micro, small and medium enterprises companies with 200 employees or fewer. In the last decade, the contribution of SMEs to Malaysia's total employment has been increasing – from the sector employing 56.4% of the workforce in 2003 to 59.5% in 2010. In South Africa, between 1985 and 2005, 90% of all new jobs were created by small, micro and medium firms.

Both Malaysia and Chile are targeting innovation as a key cornerstone of economic growth. Much of South Africa's small business policies are based on promoting black small enterprises. The dti is also looking to roll out more incubators, largely to help mentor more black business owners to get into the supply chains of large companies. However up till now the government's support to small businesses remains lack lustre. In many instances awareness of schemes also remains low.

## Incubation

Incubators in South Africa are largely funded by the government. There are also a few privately-funded incubators. The dti, in partnership with its Small Enterprise Development Agency (Seda) is now looking to roll out 250 incubators. However incubators are expensive to set up and run and the government will have to rely on partnering with the private sector to roll out more incubators. The government is also faced with questions of how to both help incubatees find market access and source funding. As well as helping businesses to serve local demand, incubators must also assist businesses to produce goods that have an international demand, if the economy is to grow.

The governments of Chile and Malaysia both view business incubators as important tools to drive innovation and create more sustainable economies for their respective countries. Although many incubators are funded by the government in Chile, these are often set up by universities. In this way a partnership exists between the state, businesses and universities. Less of a partnership exists however in Malaysia, where the state plays a much more active role and in many instances both sets up and funds incubators.

While in Chile the state wants to use incubators to move away from its resource-dependent economy, the Malaysian government deploys incubators to foster certain high-tech sectors and to improve the competitiveness of SMEs. The Chilean government also hopes to use incubators to create more entrepreneurs. Just like South Africa, Chile is on a drive to create more incubators, and in 2011 the Chilean government launched an initiative that includes a public-private investment of \$7.3bn (R59.6bn) aimed at supporting over 76 000 entrepreneurs through the launch of 13 new incubators.

## How have incubators performed?

South Africa's Seda incubators are behind incubators in Malaysia and Chile's ChileIncuba members when it comes to the number of jobs created per incubatee (in the enterprise assisted by the incubator). The number of jobs created per incubatee is greatest in Malaysian incubators (3.5 jobs on average per incubatee) – similar to jobs per incubatee in the US and Korea – compared to less than a single job created by each incubatee in Seda's incubators. Incubatees in ChileIncuba incubators create on average 2.5 jobs. Each incubatee from ChileIncuba incubators also turns over almost 10 times more revenue on average than an incubatee based in a Seda incubator. It is clear that the kind of businesses created by Seda incubators are micro endeavours with little scalability, compared to Malaysia and Chile's promotion of high growth, high-impact entrepreneurs.

#### South Africa

In South Africa Seda's incubators have grown from 23 in 2007 to 31 in 2011. These incubators represent various sectors from steel in Mpumalanga, and ICT in Gauteng, to sugar-cane in KwaZulu-Natal and furniture manufacturing nationwide. During the 2010/11 financial year Seda's 31 incubators supported 958 businesses (about 58% of these were in the agricultural sector). Seda's incubators also helped incubatees increase their collective turnover from R129 million in 2008/9 to R206 million. In all, 893 jobs were created by incubatees. This however translates to less than one new job created by each incubatee that Seda assisted in 2010/11.

#### Chile

Chile has between 25 and 30 incubators. A snapshot of Chile's incubators is provided by ChileIncuba, the country's incubator association, which represents 13 incubator organisations (which account for 70% of the incubation projects supported by the government). In 2011 these 13 incubators were incubating 600 businesses. This is an average of 46 businesses per incubator, with 66% of incubatees undergoing virtual incubation. In 2011, 234 enterprises graduated from the 13 incubators (an average of 18 per incubator). Incubatees each record average annual sales of 132 million Chilean pesos (R2.2 million). Between 2004

and 2007 incubators helped launch 700 new companies, of which 390 or 56% were operational during this time. One reason these incubators produce quality businesses is that the application process is fairly strict – only 9% of the 2 575 applications incubators received for incubation in 2010, were approved.

#### Malaysia

Malaysia's 106 incubators together house about 2 650 tenants, at an average of 25 tenant companies per incubator (ranging from 10 to over 250). Companies remain in incubation for an average of four years. Many of the first incubators in Malaysia were focused more on providing real estate than on providing effective business development services. It was only from 1999 that services such as funding and mentoring and coaching were provided to incubatees by certain incubators.

## Lessons from Malaysia and Chile

## Lesson 1: Picking winners

The experience in Chile and Malaysia shows that incubators that focus on fostering innovative ideas to solve problems that society or companies face, may have a better chance of helping incubatees reach the market, source finance and will inevitably have a higher growth potential and survival rate. Malaysia, Brazil and Chile focus on picking the best and on creating world-class businesses.

## Lesson 2: Use incentives that will incubate high-growth businesses

Chile's incentive for incubators is linked to seed funding channelled through incubators to recipients; this way both incubators and incubatees receive funding – solving two central problems in business incubation. Firstly the incentive is given to incubators only if they assist incubatees. But secondly and most importantly, the new incentive places more emphasis on the quality of the business supported than was previously the case. Only by supporting good businesses to grow, will incubators be able to get funding from the government to finance their operations and the incubation of clients.

South Africa may have a number of funds that help finance innovative businesses, but none of these offer *small seed grants* in the same way as Chile's Corfo does. This may be something to consider as the South African government looks to expand its incubation network.

#### Lesson 3: Other ways to fund incubators: royalties, equity, consulting

Incubators in South Africa are poorly funded, meaning the government will have to allow incubators to source funding from other means. Enterprise development and a mooted matching grant incentive may cover some of the costs, as would the above proposed incentive Chile uses, but other financing must not be excluded.

In Chile the private sector is quite involved in funding incubators. In fact 50% of ChileIncuba's 13 members are not funded by Corfo, in total Corfo funding accounts for 28% of the 1.8 billion pesos (R30 million) in funding to the association's members. These incubators rely on various forms to draw funding, such as taking royalty fees and shares in incubatees, charging for consulting services and getting funding from corporate sponsors:

#### Royalty fees and equity

Chile's GestaMayor does not rely on funding from Corfo instead it takes a 7% to 15% royalty from products and services developed by incubatees. The incubator opts for a royalty share rather than equity, as it would only make sense to take equity in firms that it assists that grow to a very big scale.

#### Consulting services

Chile's virtual incubator Incubated draws about 25% of its funding from the consulting services it offers incubatees. In Malaysia incubators draw most of their funding from government, but incubators also net some revenue through running training programmes and consulting.

## Corporate sponsors

Another funding option is to get corporate sponsors to host challenges and competitions from which potential incubatees are then chosen. This is what incubator 3IE does in Chile.

#### Lesson 4: Partner more with universities

University involvement in Chilean incubators is very strong and all major incubators in the South American country are either funded by, or work closely with universities. There are several advantages in having a business incubator located on a campus. These include access to in-house technology development and commercialisation, the benefit of making available experiential learning for students, faculty engagement, fostering innovation and thus contributing to economic development and society at large, partnerships with government and industry, and finally, media attention.

In this, South Africa must build more incubators on university campuses and in partnership with tertiary institutions. There is also an opportunity for the Technology Innovation Agency's (TIA) 12 technology stations and three tooling stations (as well as 14 biotechnology platforms) based at universities and universities of technology to help mentor these businesses, while attracting more innovative entrepreneurs.

#### Lesson 5: State, business can partner to access the market

Helping incubatees access the market is one of South African incubators' biggest challenges. Incubators in Malaysia and Chile use various methods to help their businesses to market their products and services. These include fairs, showrooms, market-linkage programmes and linking high-tech firms with the needs of particular customers by having companies run ideas calls (to for instance develop applications that address certain needs).

## **Driving innovation**

The state and private sector can also partner to boost innovation, with the state co-investing in privately-managed venture capital funds and helping to set up angel investment networks. A novel scheme started in Chile in 2010 involves the government funding foreign entrepreneurs to come to the country and set up there for a short time, in the hope of stimulating the creation of more local innovative entrepreneurs.

## Creating a venture capital industry

The Malaysian government has five government-backed venture-capital (VC) funds and a private equity fund which invest in innovative businesses in the country, while there are between 10 and 30 private equity and VC funds in the private sector. The state, through Malaysia Venture Capital Management (Mavcap), has since 2001 contributed RM450 million (R1.2bn) to 11 private sector venture capital funds. These funds have sourced a further RM205.5 million (R542m) to bring the total investment in private-sector venture capital funds to RM655.5 million (R1.7bn). In all 39 firms received a total of R264 million in funding from the first round of funding between 2001 and 2006.

In Chile, the government's small business support agency Corfo has since 1996 invested in 14 venture capital funds managed by private managers. The investment by the state is in the form of loans to leverage private investments. Corfo invests at a ratio of three to one and has also structured incentives to boost investments in technology-related businesses. Another Corfo vehicle allows private investors to reduce their risk, by allowing them to purchase Corfo's shares at the halfway point of the duration of the fund. By March of 2009, there were 14 venture capital investment funds in Chile, of which 10 had made investments – in 42 companies.

Yet despite Chile in 2011 being rated the most attractive country for venture capital in Latin America, VC investments in the South American companies still remain rather insignificant. Significantly, experiences in Canada and the US show that interest in venture capital increases when there are tax incentives, as does investment in technological innovation.

The government's TIA could co-invest with private-sector funds to finance small businesses and seek assistance from the private sector in managing investments. The government needs to champion funding in innovative businesses and be pro-active in talking to the private sector to co-invest.

## Stimulating angel funding

In Chile and Malaysia the state is also helping to roll out angel investment networks by funding the setting up of platforms through which angel investors can engage one another to invest in deals together, and in so doing mitigate the risks of investing in the start-up sector.

South Africa, like other emerging countries, also lacks an angel-investing environment. Attempts have been made to get high-net-worth individuals to invest in small businesses by amendments to the Income Tax Act which effectively overhaul the SJ12 venture capital tax incentive. The current VC tax incentive should be modified to allow tax rebates for those that place their investments directly in small businesses, rather than have them invest in a VC company (which in turn invests in a small enterprises) to qualify for a rebate.

## Importing entrepreneurs to drive innovation: Start-up Chile

Start-Up Chile, run by the state's small business agency Corfo, helps create a strong entrepreneural system in Chile and attempts to get entrepreneurs in Chile to think globally. Foreign entrepreneurs (including Chileans outside of the country) are individually offered \$40 000 (R324 000) in financial support if they set up in Chile for at least a six-month period. In supporting the scheme government has spent \$40 million (R324m) over four years to back 1 000 foreign entrepreneurs who may leave Chile after six months. So far from the pilot group of 24 companies that arrived in Chile in November 2010, 12 were still in the country a year later and three had, as of November 2011, been able to raise capital of over \$4 million (R32.4m). As part of the programme, entrepreneurs are expected to visit universities and schools and give talks and mentor locals.

## **Finance: Credit guarantees**

The government and the private sector can also partner together when it comes to financing small businesses. One of the most effective ways to do this is for the state to set up a credit guarantee scheme. Banks and lending organisations that are members of the scheme then advance loans to small businesses, but because the risks of lending to this sector are very high, the state provides a guarantee to these organisations that should the loan go bad the banks will be compensated by the state. Worldwide there are

more than 2 250 credit guarantee schemes in operation. Countries with the strongest policy and fiscal support for small businesses also have the highest proportion of SMEs serviced by guaranteed loans.

Small firms in Chile and Malaysia have relatively good access to finance, according to recent research figures. In Chile in 2007, almost 93% of micro enterprises and 100% of small enterprises that operated in the formal sector had a bank loan. Malaysia has been ranked by the World Bank and others as one of the world's leading countries when it comes to access to finance for SMEs and between 2000 and 2010, SME bank financing increased from 31.1% to 38.5% of all business loans.

Although South Africa shares the top World Bank ranking when it comes to access to finance for businesses, just under half of small businesses are banked (46.7%). In the 2010 GEM Report, South African entrepreneurship experts as well as business owners reported that financial support was one of the biggest challenges to entrepreneurs in the country.

While Chile's Fogape and Malaysia's CGC (Credit Guarantee Corporation) have lent millions of rands in loans through their respective schemes to thousands of business owners, South Africa's Khula guarantee scheme (which now falls under the Small Enterprise Finance Agency) ground to a near halt in the 2009/10 financial year. There had been a slight recovery by 2010/11 for Khula's scheme, when it reported lending out 81 new loans to the value of R36.5 million in that period. But, the loans disbursed remain *very* low. Since its inception in 1996, guarantees disbursed by Khula have never topped 800. In 2009 when Khula lent out 53 guarantees, Fogape gave out over 52 510 guarantees and CGC 14 073 guarantees. Khula also notched up an average default rate of 42.15% between 2006 and 2010. This means that more than four in every 10 loans lent out by banks through the scheme were defaulted upon. In comparison, both Fogape and the CGC have relatively low default rates – both at 4%.

## Lessons from Malaysia and Chile

There are several lessons that South Africa's Khula guarantee scheme can learn from Fogape and CGC; these include ways to drive lending through innovative measures (such as an auction system), the reduction of red tape in the claims process and the improvement of training at banks and trust between banks and the credit guarantee scheme.

#### Lesson 1: A unique auction system can lower the coverage rate

Fogape's auction system has led to decreasing coverage rates – average coverage rates have fallen from 80% when initiated in 2000, to 62.2% in 2010. Bidding takes place four to six times per year, and only supervised financial institutions can participate. In all, 16 financial institutions and 10 mutual guarantee societies participated in an auction in September 2011.

#### Lesson 2: Use equity and quotas to drive banks to adopt a scheme

When Malaysia's CGC was set up in 1972 banks owned over 70% of the organisation, while the remaining stake was held by the central bank (Bank Negara). The adoption of the scheme by banks was driven, in the beginning, by a central bank provision which required banks to lend 3% of their total deposits to SMEs. This was then increased to 5% and then to 10% in the years following this. By 1981 the government stipulated that 12% of banks' total lending had to go to SMEs, with 5% to be taken up by lending under the CGC. In 1994 the central bank began increasing its share in the CGC through a number of equity injections, the central bank today holds about 80% of the corporation.

## Lesson 3: Ensure a fast claims process

Speedy payments of claims by a credit guarantee scheme to member banks is vital if a scheme is to garner confidence from participating banks and lending organisations. This is especially pertinent for Khula, where over two in five loans were defaulted upon by businesses between 2006 and 2010. Khula requires a bank to

first seek a default judgment against a business owner before it can lodge a claim, which can take between one to three months to obtain or up to five years. But while it can easily take a year for Khula to settle a claim with banks, at Chile's Fogape (where banks only needs proof that legal proceedings are under way in court) it can take less than one month for a claim to banks to get paid out. At Malaysia's CGC claims are typically settled within three months of an application for claim settlement.

## Lesson 4: Use systems to reduce risk when lending

The use of credit-risk systems can also help schemes, such as Khula, to mitigate risks. The CGC makes use of three important systems to mitigate risk and make it easier for credit providers to make a decision about whether to grant SMEs loans or not. These three systems are:

- The Central Credit Reference Information System (CCRIS): banks must supply the central bank with data on loans in order for the system to calculate the risk of lending to SME clients.
- The Credit Tip-off System (CTOS): reports on any legal proceedings lodged against businesses or individuals in Malaysia.
- SME Credit Bureau: provides SME lenders with accurate credit ratings which will help in accessing finance from CGC.

#### Lesson 5: Strong bank-scheme relations

In South Africa, Khula can do well to increase communication between ordinary bankers and the scheme's officials. South African banks noted in a 2011 study that the number of meetings between its staff and Khula staff had dwindled in recent years. In Chile, Fogape sponsors an advisory committee with representation from the four banks, the nation's largest three employers' associations of small and micro businesses, the Ministry of Economy and Supervisor Fund that meets quarterly.

## **Public e-procurement portal**

The government can open state procurement to more small businesses if it uses privately developed IT systems as a platform to buy the goods and services it needs. Chile's e-procurement system, ChileCompra, was adopted by the government to help it to improve the management of public resources allocated to buying goods and services from private suppliers and at the same time offer a more open and transparent tender system. Since 2004 to 2011, the percentage of procurement from small and micro enterprises through ChileCompra has increased from 23.8% to 41%.

In South Africa efforts to put set-asides in place to promote state procurement of goods and services from small enterprises, have been blocked by the National Treasury over concern that set-asides for specific entity types are unconstitutional. It is why a 2008 cabinet-approved plan to allocate 85% of spend on 10 key goods and services to small businesses never took off. E-procurement might be the answer for the state it if intends boosting SME procurement.

## **Conclusion**

The dti has already outlined its intent to partner more with the private sector and to incentivise both its small business support agencies and the private sector to develop innovative and high-impact support programmes for small businesses. However the state should also take the lead in devising clear plans to

partner with the private sector in the areas of incubation and business support, access to finance and market access.

In taking the lead the state can boost business and incubation support to SMEs by:

 Partnering with business support agencies and incubators by setting up matching funds to crowd in the private-sector. The state must also use monetary incentives which encourage the private sector to support high-growth businesses that grow their sales, create jobs and are able to attract private investment.

In improving access to finance for SMEs, the state can:

- Partner with banks by recapitalising the Khula guarantee scheme (now under the Small Enterprise
  Finance Agency) and adopting techniques to get buy-in from banks (such as cutting red tape in
  claims processes, holding workshops with ordinary bankers, getting banks to take equity in the
  guarantee scheme, holding auctions among banks which require a certain amount of funding to be
  disbursed or finally implementing priority lending targets).
- Partner with business angels by funding angel investment networks (through for example the Technology Innovation Agency) and ensuring that the revised venture capital tax incentive of 2011 (12J of the Income Tax Act) is effective in seeing venture capital companies being set up and lending to small businesses.
- Partner with private venture capital companies by co-financing investments (through for example the Technology Innovation Agency) with such funds being invested in high-impact innovative companies.

The dti together with the National Treasury should also explore the benefits of setting up an e-procurement system for the buying and selling of state goods and services. This should be coupled with the rollout of internet access points across the country.

Together the state and the private sector can help to create more focused and effective support for SMEs.

## 1 Introduction

Evidence from Chile and Malaysia – both countries with similar emerging economies as South Africa – reveals that by partnering to provide finance and business support, the government and the private sector can boost support to small businesses. For South Africa the promotion of small businesses remains key to creating jobs and a more equitable economy. The report builds on key findings by this author in other emerging countries in a 2011 TIPS report titled "How South Africa can boost support to SMEs: Lessons from Brazil and India".

#### This report looks at:

- How the state and private sector are partnering in Malaysia and in Chile to provide incubation services and access to finance through credit guarantees, the promotion of angel investment networks and venture capital.
- How the state and private sector can further partner to promote innovation by attracting foreign entrepreneurs.

The report also considers e-procurement as an alternative to set-asides, when it comes to boosting state procurement from small and medium enterprises (henceforth SMEs).

## 1.1 Why Chile and Malaysia?

Although Chile and Malaysia are countries with smaller populations and economies than South Africa<sup>1</sup>, the three do have much in common. All three countries have ethnically diverse populations, with similar GDP per capita. The effect of taxes on business – in terms of time taken to file and costs – are relatively similar in all three countries<sup>2</sup>. Chile and South Africa both have high levels of income inequality, a poor level of primary education and ailing infrastructure<sup>3</sup>.

## 1.2 How is small business defined in these countries?

The definition of a small business in each of the three countries covered in this report varies. While Chile uses a firm's annual turnover to define small businesses, Malaysia makes use of both turnover and number of employees. South Africa relies on a mix of turnover and number of employees, with the threshold also varying across sectors in which a business operates in.

In Chile a business with an annual turnover of up to \$110 000 (R890 000) is defined as a micro enterprise, while a firm with an annual turnover of between \$110 000 and \$1.16 million (R9.4m) is categorised as a small business.

<sup>&</sup>lt;sup>1</sup> In 2011 Chile had a population of 17 million (GDP: \$281 billion, GDP per capita: \$16 100), Malaysia 28 million (GDP: \$248bn: GDP per capita: \$8 600) and South Africa 50 million (GDP: \$422bn, GDP per capita: \$11 000) (www.wikipedia.com).

<sup>&</sup>lt;sup>2</sup> In the 2012 Doing Business Report Chile ranks 45, Malaysia 41 and South Africa 44.

<sup>&</sup>lt;sup>3</sup> Wikipedia; 2012 Doing Business Report and World Bank; 2011-12 Global Competitiveness Report, World Economic Forum.

In Malaysia a business in the manufacturing and agro-based industry sector is defined as a small business either if its turnover falls between RM250 000 (R670 000) and RM10m (R26m), or if the firm has between five and 50 full-time employees. Firms in services, primary agriculture, and information & communication technology (ICT) are defined as small if their turnover is between RM200 000 (R527 000) and less than RM1m (R2.6m), or if the firm has between five and 19 full-time staff.

In South Africa the government makes use of a combination of annual turnover and number of employees to define an enterprise as small, micro, medium or large. Generally speaking a small business is defined as an enterprise which has 50 or fewer employees. Businesses are further defined as small, medium, micro or large according to their turnover by sector.

More information on how small business is defined in each of these respective countries is provided in tables produced in Appendix 1 of this report (see p64).

## 1.3 What is the aim of this report?

This report looks at what South Africa can learn when it comes to improving incubation support, access to finance, procurement and promoting entrepreneurship. It suggests the state must partner more with the private sector to improve support to small businesses.

Up until now SME support in South Africa has been rather lack lustre. Support to SMEs can be boosted if the state structures incentives that help foster and support high growth, job-creating and innovative businesses, if the state uses credit guarantee schemes to get banks to lend more to small businesses and if the state actively intervenes with monetary support to stimulate the creation of angel-investment networks and venture capital funds.

## 1.4 Structure of the report

Following this introduction the report briefly looks at policies and performance of small business in Malaysia and Chile, as well as in South Africa. A section then follows on lessons from Malaysia and Chile on how to boost incubation, followed by a section on how the state can help stimulate the setting up of angel investment networks, co-fund with venture capital funds and boost local innovation by attracting foreign entrepreneurs. This is followed by a section on credit guarantees lessons from Malaysia and Chile. The final section looks at how e-procurement can aid small firms, before conclusions are presented in Section 7.

Much of the information in this report is gleaned from a large number of interviews held with various heads of small business associations, with various government officials and policymakers who oversee small businesses and business owners themselves in South Africa, Chile and Malaysia (see a full list under References). The interviews were conducted during visits to Chile and Malaysia in November 2011 and during January and February 2012 respectively as well as via many telephonic discussions and e-mail exchanges with various experts.

## 2 Performance and policy

Small, micro and medium enterprises make up 99% of all businesses in Chile<sup>4</sup> and Malaysia<sup>5</sup>. In Chile the sector accounts for 20% of gross domestic product (GDP) and 60% of jobs<sup>6</sup>, while in Malaysia SMEs contribute 31% of the GDP, 56% of employment and 19% of exports. Figures for Malaysia, however, are from a five-year-old census, the Census of Establishments and Enterprises 2005<sup>7</sup>. A new census was conducted in 2011, but data was not yet available at the time of writing this report.

In Chile in 2009 there was a total of 741 430 small, medium and micro enterprises. About 80% of these are micro enterprises. In the five years up to 2009, the number of small, medium and micro enterprises there has grown by about 5%. Going on various estimates there are today between 550 000 and 900 000 SMEs in Malaysia. By far the majority of these are micro enterprises, and over four fifths are located in the services sector. Most SMEs are involved in labour-intensive activities and even though they make up over half the population of Malaysia, only about a quarter of small enterprises are run by Malays (and most of these firms have low turnovers). Most SMEs in Malaysia are run by Chinese and Indian Malaysians.

Table 1: Comparative statistics on small business, Chile, Malaysia and South Africa

	Chile (2009)	Malaysia (2005)	South Africa (2007)
Total small businesses	741 430	548 267	2.43 million
GDP contribution	20%	31%	27% to 34%
Percent of the workforce	60%	59.5%*	55%

Note: \*2010 data: SME Corporation annual report (2010: 22).

Sources: Department of Trade and Industry's Annual Review of Small Business 2006-2008, Malaysia's 2005 Census of Establishment and Enterprises and Interview with Manuel Ariztia Fuenzalida, Ministry of Economy.

<sup>&</sup>lt;sup>4</sup> 58% of Chilean small, medium and micro enterprises are in commerce and services, 11% in agriculture, 11.5% in transportation and only 6.5% in industrial activities. SMEs have the greatest market share in services (38%), agriculture (35%), construction (31%) and trade (24%) (A Strategy to Promote Innovative Small and Medium Enterprises, Goldberg, 2008: 8-12).

<sup>&</sup>lt;sup>5</sup> http://www.btimes.com.my/Current News/BTIMES/articles/16MONVIEW-2/Article/index htm.

<sup>&</sup>lt;sup>6</sup> Fogapepresentation, Alessandro Bozzo T, 2011.

<sup>&</sup>lt;sup>7</sup> http://www.btimes.com.my/Current News/BTIMES/articles/16MONVIEW-2/Article/index htm.

<sup>&</sup>lt;sup>8</sup> In 2009, 751 399 businesses were trading in Chile. Among these, 19 808 were medium-sized firms, 131 728 were small businesses and 589 894 were micro enterprises. Added to this there were 9 969 large companies then operating in the country (Interview with Manuel Ariztia Fuenzalida, Ministry of Economy).

<sup>&</sup>lt;sup>9</sup> In 2004 there were 684 266 small and micro enterprises (571 535 micro, 112 731 small) and 15 748 medium and 7 620 large (Fogape presentation – Acerca de Fogape).

Malaysia's 2005 Census of Establishment and Enterprises by the country's department of statistics, held there to be 548 267 SMEs in Malaysia – 100 608 are small businesses, 434 939 are micro enterprises and 12 720 are medium-sized firms. Most SMEs are in the services sector (86.6%), with 7.2% in manufacturing and 6.2% in agriculture (SME Corporation annual report 2010: 11).

<sup>&</sup>lt;sup>11</sup> LL Koong, from the ACCCIM estimates that there are 900 000 SMEs in Malaysia, with 60% of the 12 million workforce employed in these firms (Interview with LL Koong).

<sup>&</sup>lt;sup>12</sup> Interview with LL Koong, SME chairman, ACCCIM, January 30, 2012, Kuala Lumpur.

<sup>&</sup>lt;sup>13</sup> One estimate is that only about a quarter of Malaysia's present 800 000 SMEs are owned by indigenous Malays or Bumiputeras. Of these 200 000, about 88% make less than RM250 000 per year (Rural and Regional Development Minister Seri Mohd Shafie Apdal quoted in the New Straits Times, 29 January 2012).

Figures on the number of small businesses in South Africa remain sketchy with no official repository for data on the number of small enterprises. Noting this constraint, FinScope's 2010 South Africa Small Business Survey reveals that there are close to six million small businesses in the country and nearly 5.6 million small business owners. These enterprises are extremely small however: 67% employ no more than the owner themselves. In total, 300 000 businesses, or 6% of all entrepreneurs, employ five or more people. A further 1.5 million or 27% employ between one and four people. And just 17% of small business owners run registered businesses.

According to statistics in the Department of Trade and Industry's Annual Review of Small Business 2006-2008, South Africa had 2.43 million small enterprises in 2007. Of these 595 000 were in the formal sector and 1.39 million were in the informal sector. A further 59 000 people above 65 years old were running a business (and a further 431 000 were involved in subsistence farming). Small and micro enterprises contribute between 27% and 34% of South Africa's GDP. 14

Figures drawn from the Labour Force Survey by a labour economist at Adcorp in early 2012 reveal that in South Africa the number of small businesses has since 2006 shrunk by 18.2% (from 2.4 million to 2 million in 2012) with 100 000 small businesses closing their doors each year. The 2009 Global Entrepreneurship Monitor (GEM) Report also revealed that the number of start-ups declined by 40% between 2008 and 2009.

## 2.1 Small businesses employ the most number of people

The percentage of workers employed by small businesses in Malaysia and Chile is on the rise. In Chile the proportion of persons working in SMEs rose from 54.5% of employees in the February-April 2010 quarter to 56.4% in February-April 2011. Also, while employment in general increased by 6.8% from February-April 2010 to the same quarter in 2011, the increase was higher for small businesses, at 9.5%. In the last decade, the contribution of SMEs to Malaysia's total employment has been increasing – from the sector employing 56.4% of the workforce in 2003 to 59.5% in 2010. Much of this increase was between 2007 and 2010 when SME employment growth outperformed the overall growth in employment. In the last decade, the contribution of SMEs to Malaysia's total employment has been increased was between 2007 and 2010 when SME employment growth outperformed the overall growth in employment.

Small firms also create the highest number of jobs in Chile. A 2011 study by the Research Division of Chile's Ministry of economy revealed that of the 262 430 new salaried jobs created in the February-April 2011 quarter compared to the same period in 2010, 90% were generated by micro, small and medium enterprises companies with 200 employees or fewer.<sup>19</sup>

In South Africa, between 1985 and 2005, 90% of all new jobs were created by small, micro and medium firms. According to Neil Rankin from Wits University 73% of employed people work for firms with fewer than 50 employees. 1

<sup>&</sup>lt;sup>14</sup> Timm, S. (2011b: 16).

<sup>&</sup>lt;sup>15</sup> Adcorp Employment Index, February 2012.

<sup>&</sup>lt;sup>16</sup> Timm, S. (2011b: 17).

<sup>&</sup>lt;sup>17</sup> http://www.economia.gob.cl/2011/06/02/microempresas-y-pymes-lideran-la-creacion-de-empleo-en-el-ultimo-ano.htm

<sup>&</sup>lt;sup>18</sup> SME Corporation Annual Report (2010: 22).

<sup>&</sup>lt;sup>19</sup> http://www.economia.gob.cl/2011/06/02/microempresas-y-pymes-lideran-la-creacion-de-empleo-en-el-ultimo-ano.htm

<sup>&</sup>lt;sup>20</sup> Finscope Small Business Survey Report, 2006

<sup>&</sup>lt;sup>21</sup> Quoted in the 2009 GEM Report.

## 2.2 Overview of policies in the countries under study

Both Malaysia and Chile are targeting innovation as a key cornerstone of economic growth. Much of South Africa's small business policies are based on promoting black small enterprises, as black people were previously excluded from the economy under apartheid. The government is also boosting incubation.

The Chilean government in 2010 embarked upon a competitiveness and innovation drive, which includes improved support for small businesses<sup>22</sup> – by boosting existing measures (such as the state small business fund Fondo Corfo, and improving training) and introducing additional measures such as ensuring that the state pays small firms within 30 days on receipt of invoice.

In Malaysia, the 10th Malaysia Plan (2011-2015) aims to jump-start the nation's push towards a high-income economy and by 2015, while the government wants to make Malaysia one of the top 10 nations in the world for doing business<sup>23</sup>. To achieve this, the government is set to start a comprehensive review of business regulations, starting with rules that impact the national key economic areas. This means scrapping outdated rules.<sup>24</sup> The country's SME Masterplan (2011-2020)<sup>25</sup> and SME Integrated Plan of Action (2011) which details the planned programmes for 2011, aim to create globally competitive SMEs by setting up an enabling system to accelerate the growth of SMEs. In the Ninth Malaysia Plan period, SME development amounted to RM26 billion (R69bn) or almost 12% of the development expenditure focusing on enhancing access to financing, building capacity and capability, and strengthening enabling infrastructure.<sup>26</sup>

Jose Ernesto Amoros, UDD Ventures' director, believes Chile's culture of entrepreneurship has improved quite significantly in recent years. He reports that while three or four years ago there was nothing on entrepreneurship in the South American country, a lot is currently happening<sup>27</sup>. Indeed, figures on self-employment in Chile show that the number of companies registered in 2011 is more than 50% higher than those registered four years ago. Amoros attributes the increase to improved macro-economic conditions, deregulation which has made it easier to start a business and the earthquake in 2010 having reinvigorated the economy. The government's improvements in supporting SMEs have a played a role in this growth, impacting even on those outside of Santiago, the capital city. But, he adds that despite all the good work done by the Chilean government in tweaking its seed funding to back quality entrepreneurs, the government still needs to improve the financial system. Angel networks also need to be bolstered, while more SMEs need to be more involved in supply-chain networks.<sup>28</sup>

Small business support in South Africa is aimed largely at helping to bring black entrepreneurs into the economy. The Department of Trade and Industry is also looking to roll out more incubators, largely to help mentor more black business owners to get into the supply chains of large companies. The Department

The Chilean government's small business support is provided by two agencies: Corfo – which provides training and funding for high-growth small enterprises, and Sercotec – which provides support and funding mostly to micro enterprises.

<sup>&</sup>lt;sup>23</sup> Malaysia ranked 23rd in the World Bank Doing Business 2010 report.

<sup>&</sup>lt;sup>24</sup> 10 Malaysia Plan", Strait Times, June 11, 2010.

<sup>&</sup>lt;sup>25</sup> The plan is overseen by the National SME Development Council (NSDC) set up in 2004 and headed by the Prime Minister. The measures the plan maps out include increasing business formation, intensifying formalisation to incentivise innovation, growth and promote fair competition, raising productivity of SMEs, expanding the number of high growth and innovative firms (SME Corp, 29 April 2011: http://www.smecorp.gov.my/node/2046).

<sup>&</sup>lt;sup>26</sup> SME Corp, 29 April 2011:http://www.smecorp.gov.my/node/2046

<sup>&</sup>lt;sup>27</sup> Amoros points out that at least 20 events were taking place in Santiago during Global Entrepreneur Week in November 2011. This reflects efforts by government to signal that it is behind entrepreneurship

<sup>&</sup>lt;sup>28</sup> Interview with Jose Ernesto Amoros, director, UDD Ventures.

wants to help roll out 250 incubators by 2015<sup>29</sup>. However up till now the government's support to small businesses remains lack lustre. In many instances awareness of schemes also remains low<sup>30</sup>.

## 3 Incubation

The state and private-sector incubators can partner together to reach more small businesses and help these businesses grow, create more jobs and to source outside funding and markets. Chile is already doing this, as will be seen below. South Africa's Department of Trade and Industry is considering funding incubator organisations that are looking to set up more incubators. This is a welcome sign. The government could also consider providing a pot of funding and let large companies come forward with their own ideas on how to support incubation programmes. Most suitable would be programmes where big companies work with small businesses to assist them to join their supply chain<sup>31</sup>.

## 3.1 South Africa: A luck-lustre experience

Incubators in South Africa are largely funded by the government – either at a national or provincial level. There are also a few privately-funded incubators. The Minister of Trade and Industry Rob Davies believes that incubation programmes are some of the most successful of the measures the department uses to back small businesses. The department wants to, with the support of the Small Enterprise Development Agency (Seda), roll out 250 incubators by 2015<sup>32</sup>. The government is keen to use incubators to help develop more small businesses – particularly black-owned enterprises – that can supply large businesses with the products and services they require.

However incubators are expensive and the government will have to rely on partnering with the private sector to roll out more incubators. The government is also faced with serious questions of how to both help incubatees find market access and source funding. To this end the government wants to rely on new incentives and the enterprise development element in the existing Black Economic Empowerment (BEE) legislation to compel more large companies to roll out incubators to develop small firms. The Department last year mooted an incentive, which could be in the way of a matching grant, to help incubator organisations to expand the existing number of incubators. The government also wants to revise BEE codes so that these incentivise more large companies to get involved in enterprise development measures, some of which involve running an incubator to develop new suppliers. Penalties for those that do not do enough to support small firms are also on the cards.

Another challenge is that many of Seda's incubators are not sufficiently focused on creating high-growth innovative businesses; but rather end up backing generally low-skilled businesses that operate in overtraded sectors such as construction and furniture. Incubators should be used more strategically to develop high-risk sectors which without government support would not take off – such as aerospace and biotechnology. As well as helping businesses to serve local demand, incubators must also assist

<sup>&</sup>lt;sup>29</sup> Ensor, Linda, 9 February 2012, Business Day.

<sup>&</sup>lt;sup>30</sup> Timm, S. (2011).

<sup>&</sup>lt;sup>31</sup> Interview with Septi Bukula, small business analyst, Osiba Research, March 2012.

<sup>&</sup>lt;sup>32</sup> Ensor, Linda, 9 February 2012, "Incubators' new buzzwords in enterprise promotion", Business Day.

businesses to produce goods that have an international demand – either for the rest of Africa or overseas, if the economy is to grow.

## 3.2 The role of incubators in Malaysia and Chile: Tools of innovation

The governments of Chile<sup>33</sup> and Malaysia both view business incubators as important tools to drive innovation and create more sustainable economies for their respective countries. Although many incubators are funded by the government in Chile, these are often set up by universities. In this way a partnership exists between the state, businesses and universities. Less of a partnership exists however in Malaysia, where the state plays a much more active role and in many instances both sets up and funds incubators.

While in Chile the state wants to use incubators to move away from its resource-dependent economy, the Malaysian government deploys incubators to foster certain high-tech sectors and to improve the competitiveness of SMEs<sup>34</sup>. The Chilean government also hopes to use incubators to create more entrepreneurs. Just like South Africa, Chile is on a drive to create more incubators, and in 2011 the Chilean government launched an initiative that includes a public-private investment of \$7.3bn (R59.6bn) aimed at supporting over 76 000 entrepreneurs through the launch of 13 new business incubators and the backing of over 55 projects<sup>35</sup> focused on creating an environment conducive to entrepreneurship through training, technical consultancies, networks, expert support and promotion of a culture of entrepreneurship.<sup>36</sup>

Chile has between 25 and 30 incubators (the second largest incubator market in South America after Brazil<sup>37</sup>), which are supported mainly by the government and by universities. The country's incubators are fairly new with most having only been operating for five years<sup>38</sup>. Most of the country's incubators are focused on high-growth and innovative businesses, in line with the government's mandate to boost the number of innovative and high-impact firms in the country. The primary focus of incubators is on high value services such as consulting and networking<sup>39</sup>. The government is also attempting to finance and support angel-fund networks to help finance incubatees, but this however has had limited success (see section 4 on Driving innovation).<sup>40</sup>

<sup>&</sup>lt;sup>33</sup> The need to innovate is clear, currently, Chile has very low levels of investment in research and development (R&D) at just 0.4% of GDP in 2008 compared to the average of 2.3% in OECD member countries. Private enterprise accounts for just 44% of all R&D in Chile. In 2011 Chile's President Sebastián Piñera launched a new drive to boost Chile's competitiveness and to get the country to become more innovative (http://www.corfo.cl/corfo\_det\_20110224174655.aspx). Piñera's competitiveness drive includes 50 measures to improve the competitiveness of the country, which will give effect during his tenure, to meet the goal of growing the economy at 6% a year (Santiago, Tuesday May 17, 2011, http://www.economia.gob.cl/2011/01/24/en-primer-consejo-consultivo-permanente-de-empresas-de-menor-tamano-emt-ministro-de-economia-anuncia.htm).

<sup>&</sup>lt;sup>34</sup> Under the second phase of the SME Master Plan there are 32 action plans. Another key target under the plan is to raise 32% in 2010 to 41% in 2020 (http://www.nst.com.my/local/general/6-programmes-to-boost-sme-contribution-1.10106).

The 55 projects will be carried out by universities, institutes, associations and foundations linked to entrepreneurial activity, financed by an Innova Chile contest (http://www.economia.gob.cl/2010/01/12/ministro-de-economia-dio-partida-a-plan-7-300-millones-para-apoyar-a-mas-de-76-mil-emprededores.htm).

http://www.economia.gob.cl/2010/01/12/ministro-de-economia-dio-partida-a-plan-7-300-millones-para-apoyar-a-mas-de-76-mil-emprededores.htm

<sup>&</sup>lt;sup>37</sup> Brazil had about 400 incubators in 2010 (Interview with Ari Plonski, São Paulo, August 2010).

<sup>&</sup>lt;sup>38</sup> According to ChileIncuba, an incubator association which represents 13 incubator companies which account for 70% of all projects incubated under Innova Chile, 60% of its members are between three and six years old. (ChileIncuba presentation August 2011). The first incubator, Santiago Innova, was established in 1992.

<sup>39</sup> Business Incubator Financing and Financial Services in Chile, Aruna Chandra and Magda Narczewska (2009: 21).

<sup>&</sup>lt;sup>40</sup> *Ibid.* p1-3.

Incubators in Malaysia sprung up in the mid-1980s, after the government began pursuing an industrial policy and developing heavy industries such as the steel and automotive sectors. Incubation became a means to support the development of suppliers. In Malaysia, stimulating innovation and technology adoption by SMEs forms one of the five strategic thrusts of the government's third Industrial Master Plan 2006-2020<sup>43</sup>. The government also wants to create a technology commercialisation platform with the idea that the platform will help to roll out a privately-managed network of centres which will promote innovative ideas and link SMEs to technical and financial support. Many of Malaysia's 106 incubators are focused on the IT sector, which is not surprising given that Malaysia is a highly connected country. The Malaysian government, which runs 71 of these incubators are incubators on tech-based incubators which are aimed at developing strategic sectors in the economy. The government wants incubators to be more involved with commercialising technologies as most incubators in Malaysia have in the past served mainly as business premises.

## 3.3 How have incubators performed?

South Africa's Seda incubators are behind incubators in Malaysia and Chile's ChileIncuba members when it comes to the number of jobs created per incubatee (the enterprise assisted by the incubator). The number of jobs created per incubatee is greatest in Malaysian incubators (3.5 jobs on average per incubatee) – similar to jobs per incubatee in the US and Korea<sup>48</sup> – compared to less than a single job created by each incubatee in Seda's incubators. Each incubatee from ChileIncuba incubators also turns over almost 10 times more revenue on average than an incubatee based in a Seda incubator. It is clear that the kind of businesses created by Seda incubators are micro endeavours with little scalability, compared to Malaysia and Chile's promotion of high growth, high-impact entrepreneurs.

<sup>&</sup>lt;sup>41</sup> In 1988 a small incubator unit was set up at the Standard and Industrial Research Institute of Malaysia (Sirim). The number of incubators only dramatically expanded about 10 years later however (Global Practice in Incubation Policy Development and Implementation, Infodev, 2010). In 2002, a policy of technology-based incubators, named The National Incubator Development Framework, was formulated which led to the establishment of a specific support programme for IT and multimedia-related business incubators. It also resulted in a movement to develop MSC-Status Incubators, Cyber-Centres and Cyber-Cities. Malaysia's national incubator association, the National Incubator Network Association (Nina), was set up in 2004 to help incubators share best practices and create linkages (The Role of the National Incubator Network Association in achieving the National Innovation Objectives).

<sup>&</sup>lt;sup>42</sup> Interview with Mohd Ghazali Mohd Yunus, Senior General Manager for SME Development Centre, Sirim, Kuala Lumpur, January 30, 2012.

<sup>&</sup>lt;sup>43</sup> The others are: boosting SME competitiveness, capitalising outward investment opportunities, improving SME policies and regulations and growing the contribution of SMEs in the services sector (SME Corp presentation by Bordhan Sidik, 18 November 2010).

<sup>&</sup>lt;sup>44</sup> New Strait Times, 24 November 2011 (http://www.nst.com.my/local/general/6-programmes-to-boost-sme-contribution-1.10106)

Malaysia's incubators are spread as follows: 25 tech-based incubators, 18 Mara (the state's agency to assist bumiputeras)\_incubators (see Appendix 2), 18 incubators run by banks, 17 run by the various development corporations in each state, 10 agricultural incubators run by the old Ministry of Entrepreneur and Co-operative Development Mardi (a statutory body which has been mandated to conduct research in agriculture, food and agro-based industries), 9 handicraft incubators, four university incubators, two run by MECD, and three run by others. (The Roles of Business Incubation in Innovation Led Economy (Malaysia), Shahazman Abu Samah Park Management & Services Division Technology Park Malaysia, 2010).

<sup>&</sup>lt;sup>46</sup> Malaysia has a broadband household penetration rate of 62.3% (The Star, February 2, 2012).

<sup>&</sup>lt;sup>47</sup> Hafsah Hashim, chief executive, SME Corp emailed answers, March 2012.

<sup>&</sup>lt;sup>48</sup> The US's 1 100 incubators with 27 000 incubatees create 100 000 jobs – 3.5 jobs per incubate on average (NBIA presentation, 2006, David Monkman), while Korea's 289 incubators with 3 972 incubatees create 20 000 jobs or five jobs per incubatee (Business Incubators and Entrepreneurship in Korea: Analyzing Historical Development and Current Situation Sangmoon Park, 2008). China's Torch programme however, has 614 incubators with 44 750 incubatees which create 933 000 jobs – an average of almost 21 jobs per incubatee (President and CEO; Xie Gaofeng, Science & Technology Attaché, Embassy of China in Budapest).

#### 3.3.1 South Africa

In South Africa Seda's incubators<sup>49</sup> have grown from 23 in 2007 to 31 in 2011. These incubators represent various sectors from steel in Mpumalanga, and ICT in Gauteng, to seven furniture manufacturing incubators and a sugar-cane incubator in KwaZulu-Natal.

Table 2: Performance of incubators in Chile, Malaysia and South Africa

	SA's Seda (2010/11)	Chile Incuba* (2011)	Malaysia (2010)
Incubators	31	13	106
Incubatees (including virtual)	958	600	2 650 (tenants)
Incubatees per incubator	31	46	25
Average turnover	R215 000	R2.2m	Unavailable
Jobs	893	1 500	9 250
Jobs per enterprise	0.9	2.5	3.5

Sources: Chile: ChileIncuba presentation by Alvaro Bustos Torreblanca, Chile Incuba meeting 29 August 2011; South Africa: Seda Technology Programme 2010/11 Annual Report; Malaysia: Global Practice in Incubation Policy Development and Implementation, Infodev, 2010.

During the 2010/11 financial year Seda's 31 incubators<sup>50</sup> supported 958 businesses – 756 existing firms and 202 new small enterprises (about 58% of these were in the agricultural sector). Seda's incubators also helped incubatees increase their collective turnover from R129 million in 2008/9 to R206 million, mainly due to support from its construction incubator. In all, 893 jobs were created by incubatees. This however translates to less than one new job created by each incubatee that Seda assisted in 2010/11.<sup>51</sup> The number of jobs that incubators in South Africa create is therefore quite small, with one of Seda's most successful incubators, Furntech, only creating about three jobs per business while in the incubator.<sup>52</sup> Other Seda incubators similarly create few jobs<sup>53</sup>.

According to researchers Wolfgang Thomas and Sandheep Ramluckan<sup>54</sup>, Seda incubators' performance between 2007/8 and 2009/10 reveals mixed results. The two found that while the incubators appeared successful in the number of businesses they helped set up and the jobs these enterprises created, incubatees' overall income had decreased over these three years and the number of small firms still in business were declining – with an average survival rate of 76% after one year and just 57% after two years.<sup>55</sup> However, these researchers ascribed the change to the recession rather than to the performance of

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<sup>&</sup>lt;sup>49</sup> The South African government's incubation programme falls under the Small Enterprise Development Agency's (Seda) technology programme. The programme sprung out of the Godisa Trust in 2000 and was incorporated into the agency as the Seda Technology Programme in 2006.

<sup>&</sup>lt;sup>50</sup> Seda's best performing incubators are Furntech, the Seda Construction Incubator, Timbali and the Soshanguve Manufacturing Technology Demonstration Centre (SMTDC) (Seda Technology Programme Annual report 2010/11).

<sup>51</sup> Seda Technology Programme Annual report 2010/11.

<sup>&</sup>lt;sup>52</sup> Furntech in 2010/11 supported 66 incubatees who employ 191 people (about 2.9 jobs per enterprise) (See Timm, S. 2011c).

<sup>&</sup>lt;sup>53</sup> Incubatees in the Mpumalanga Stainless Steel Cluster incubator employ no more than three or four workers (Interview with Thulo Majoe, general manager of Mpumalanga Stainless Steel Cluster incubator, October 2011).

<sup>&</sup>lt;sup>54</sup> "Raising Businesses", Sandheep Ramluckan and Wolfgang Thomas, *Agenda*, No 2, 2011, USB, pp. 19-21.

<sup>55</sup> Ibid.

the incubators themselves. Interestingly they found that high-tech incubators usually have a higher success rate, *inter alia* owing to the relatively better training of incubatees.

In the private sector, incubators have also had some success in creating new incubatees and jobs and growing revenue of incubatees. But it is uncertain how many of these firms are still operating after having graduated. $^{56}$ 

#### 3.3.2 Chile

A snapshot of Chile's incubators is provided by Chilelncuba, the country's incubator association, which represents 13 incubator organisations (which account for 70% of the incubation projects supported by the government). In 2011 these 13 incubators were incubating 600 businesses. This is an average of 46 businesses per incubator, with 66% of incubatees undergoing virtual incubation. <sup>57</sup> In 2011, 234 enterprises graduated from the 13 incubators (an average of 18 per incubator). Incubatees each record average annual sales of 132 million Chilean pesos (R2.2m) – ranging between 24 million pesos (R400 000) and 450 million pesos (R7.5m). Between 2004 and 2007 incubators helped launch 700 new companies, of which 390 or 56%, were operating during this time. <sup>58</sup>

A snapshot of one of the 13 members – the Incubatec incubator where about 25 businesses graduated between 2006 and 2011 – reveals some interesting statistics. In all 80% of Incubatec graduates are still operating. About 20% of graduates are classified as very successful – achieving double-digit growth in sales and having either expanded their business outside of their respective region or begun exporting <sup>59</sup>. These firms employ on average six people each. About 10 or 12 companies have received grant funding from Corfo (this is 100% of the companies that Incubatec has presented to Corfo for funding). At Incubatec, about 20% to 30% of entrepreneurs the incubator supports are from the university (Universidad La Frontera, Temuco). Most are business owners or former employees. The average age of incubatees is between 35 and 45 years old. <sup>60</sup>

Some successful graduates of Chilean incubators include:

- A company which is working with the Australian government to do genome research on the HIV virus.<sup>61</sup>
- A firm that exports tulips to Colombia, the US and Peru.<sup>62</sup>
- A satellite control company which currently monitors about 500 trucks and has begun franchising the idea across South America.<sup>63</sup>
- A high volume electrostatic sprayer that is being tested as a crop sprayer product in California.<sup>64</sup>

<sup>59</sup> Interview with Gerardo Lagos Wiesenfeld, Incubatec.

http://www.3ie.cl/empresas/noticias/2011/9/1/chileincuba-ag-realizo-encuentro-nacional-de-incubadoras-en-la-usm

<sup>&</sup>lt;sup>57</sup> ChileIncuba presentation by Alvaro BustosTorreblanca, ChileIncuba meeting 29 August 2011.

<sup>58</sup> Ibid.

<sup>60</sup> Ihid

This is a biotech company called Genome, doing genetic research for bipolar tests for infants. The company was incubated by GestaMayor and has received US\$15m in funding, including US\$2m from the university and funding from Roche. Seven PhDs are working in the company (Interview with Gerardo Lagos Wiesenfeld, Incubatec).

<sup>&</sup>lt;sup>62</sup> Araucinia Flowers exited Incubatec in 2009 after two years of incubation and now has sales of \$1.5m.

<sup>&</sup>lt;sup>63</sup> Vighia – a satellite control company which currently monitors about 500 trucks which has 15 employees and exited in September 2011 after two years of incubation. The company has already begun franchising in Peru, Panama and Argentina.

One reason these incubators help produce quality businesses, is that the application process is fairly strict – only 9% of the 2 575 applications incubators received for incubation in 2010, were approved.<sup>65</sup> Added to this most of the incubatees<sup>66</sup> are in their 30s, have completed higher education and are skilled at using computers and IT equipment.

#### 3.3.3 Malaysia

Malaysian incubators together house about 2 650 tenants, at an average of 25 tenant companies per incubator (ranging from 10 to over 250). Companies remain in incubation for an average of four years.<sup>67</sup> In Malaysia each incubatee employs an average of 3.5 employees, meaning incubated companies create around 9 250 jobs. Although this is a relatively small number, the World Bank's incubator association Infodev believes it is still "extremely important" because of its high demonstration and multiplier effects. For instance KHTP Incubators in Kedah State has about 30 tenants that each employ about four or five people, but these tenants increase their staff quota to about 40 to 50 employees after exiting the incubator.<sup>68</sup> However a full report on the impact of incubation on SMEs in Malaysia (in terms of sales volumes and contribution towards GDP of incubatees) is still being prepared by SME Corp.<sup>69</sup>

According to Infodev, the main strength of the incubation movement in Malaysia is the extent of government support for incubators. The organisation believes however that the large amount of government support is also these incubators' main weakness – relying too much on government funding without close monitoring may create incubators that run along "civil service attitudes, rather than entrepreneurial encouragement". Infodev points out that this may explain the reported low awareness of tenants of incubator services and poor attention to cost-efficiency. Many of the first incubators in Malaysia were focused more on providing real estate than on providing effective business development services. It was only from 1999 that services such as funding and mentoring and coaching were provided to incubatees by certain incubators. Nazrin Hassan, chief executive of the Cradle Fund<sup>71</sup>, a government fund which finances innovative businesses, believed part of the reason for this is that most government-run incubators are not run by those who have run their own business before, but rather by civil servants. Today just 24 of Malaysia's incubators provide incubation services such as mentoring and business (the third-generation model or business accelerators). Under the 10<sup>th</sup> Plan incubators will also be encouraged to focus more on providing business and development services. Incubator managers and operators will also receive specialised training to improve their professionalism.

<sup>&</sup>lt;sup>64</sup> The company received \$375 000 (R3.2 million) in technology-grant funding from Corfo to help develop the product.

The average number of applications per incubator is 264 – and range between a minimum of 60 in one incubator to 500 to another (ChileIncuba presentation by Alvaro Bustos Torreblanca, ChileIncuba meeting 29 August 2011).

The average age of the 13 ChileIncuba incubatees is 35 years, 80% are men, half have completed higher education, 100% use IT tools (internet mainly). In all 70% are opportunity-driven entrepreneurs (ChileIncubapresentation, Alvaro Bustos Torreblanca).

<sup>&</sup>lt;sup>67</sup> Global Practice in Incubation Policy Development and Implementation, Infodev, 2010

<sup>68</sup> Ibid.

<sup>69</sup> Interview with Mohd Ghazali Mohd Yunus.

<sup>&</sup>lt;sup>70</sup> "Global Practice in Incubation Policy Development and Implementation", Infodev, 2010.

<sup>&</sup>lt;sup>71</sup> Cradle Fund was set up in 2003 under Mavcap after the present-day chief executive Nazrin Hassan, lobbied the Prime Minister to set up a seed fund. In 2007 Cradle Fund became a separate company.

<sup>&</sup>lt;sup>72</sup> Interview with Nazrin Hassan, chief executive of the Cradle Fund.

<sup>&</sup>lt;sup>73</sup> "Global Practice in Incubation Policy Development and Implementation", Infodev, 2010.

<sup>&</sup>lt;sup>74</sup> 10<sup>th</sup> Malaysian Plan, 2011.

## 3.4 Lessons from Malaysia and Chile

As South Africa prepares to roll out more incubators, there are several key lessons that it can learn from Chile and Malaysia, these include picking winners and innovative companies to enter incubators, structuring its funding of incubators so that high-impact entrepreneurs are supported, partnering with universities, as well as with large companies to improve market access and looking at other ways to fund incubatees. Here are the lessons:

## 3.4.1 Lesson 1: Picking winners

The experience in Chile and Malaysia shows that incubators that focus on fostering innovative ideas to solve problems that society or companies face, may have a better chance of helping incubatees reach the market, source finance and inevitably have a higher growth potential and survival rate. It also helps that these incubators have tough entrance criteria – they pick the winners and work with these. Incubator managers in Chile seem to acknowledge the fact that there is a natural attrition rate; also, if incubators try to help everyone they end up mentoring struggling businesses that more often than not end up failing in any case.

Yet the main focus should not be on how many businesses fail. Unsustainable businesses should naturally fail. The question is how solid the system is. If incubators are able to support a few good companies that can create jobs, supply big companies, export and develop intellectual property and technology that will in turn be used to benefit many other ordinary people and SMEs, then these incubators would have proven to be successful. In this way they can also grow the reputation of their respective incubator. Creating too many micro-firms that limp along and are overly dependent on incubators to survive is opposed in Malaysia, Brazil and Chile. These countries focus on picking the best and on creating world-class businesses. In turn, solely aiming to supporting any generic business is misguided. The problem here is: if a business is all things to everyone, who is going to buy their product? Enterprise development is a great way for incubators to help fund black incubatees that intend supplying products and services to large companies, but again these incubatees need to be creating products or services that are in demand from specific customers, thereby enhancing the enterprises' growth prospects. Along similar lines, these businesses must offer something new and unique to their big company buyers.

#### Box 1: Picking winners – the high-growth model

Chile's 3IE and Octantis incubators are examples of the tough approach an incubator must take if it is to help foster high-growth and internationally-orientated businesses.

Between 2001 and October 2011, Valparaiso's 3IE helped create 60 businesses. Yet less than half of these, or 28 start-ups, have gone on to make sales. Of these start-ups, just 12 were operating in 2011. Yet these 12 surviving start-ups collectively employ 150 people and generate on average \$470 000 (R4 million) a year in sales.<sup>75</sup>

<sup>&</sup>lt;sup>75</sup> These include: www.bissen.cl, www.lovicuna.cl, www.psychoworld.cl, www.mes.cl, www.ifitec.cl, www.austec.cl. The first graduate was in 2005 (www.defontana.com, followed by www.i-educationholdings.com). Some exit successes are: 1. www.i-educationholdings.com: technologies for learning - started in 2002 by Gilbert Leiva and Adrian Urmeneti - reached sales of US\$3m with clients including Canon, HP and Intel, before the two sold it and started another business. 2. Biotecnologia Antofagasta, a biotech company aimed at solving environmental problems in mining which was started by Maria de La Lus Osses in 2005, today has US\$1.3m in sales a year. Now based in Antofagasta, the company's clients include Codelco and BHP Billiton. The company is valued at US\$5.3m and has since sold a US\$400 000 stake to Sintex. 3. Psychoworld, makes mobile apps and generates about US\$400 000 a year with clients including Movistar, Claro and Entel. The company, valued at US\$3m, is run by Max Celedon and Zesar Hernandez and has sold a 10% stake to Incubaccion SA.

To ensure winners are backed, a strict application process is followed. Each year 3IE receives over 1 000 ideas and project applications – but only 8% of these ideas are incubated. Of those, only 10% make it through the system to become global, high-growth entrepreneurs (the main focus of 3IE). Ideas come from sectors such as biotech, architecture, energy efficiency, environmental support and software applications.

Corfo has disbursed US\$2.5 million (R20.2m) in seed funding to entrepreneurs through 3IE, while angel investors have invested a further US\$1.2 million (R9.7m) in three companies.

3IE, an incubator that nurtures high-growth entrepreneurs, uses four phases in its incubation model, (see Figure 1).

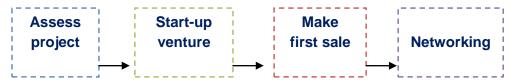
The first phase typically begins after a business competition and involves assessing the entrepreneur's project, finding partners and making a prototype. Workshops are also held in that phase.

The second phase involves starting up a new venture and entrepreneurs graduate to this phase if they are able to get Corfo Line Two funding<sup>76</sup>. They must present to a panel made up of both 3IE and external advisors. This phase involves searching for mentors, launching the company and developing a business plan and a funding application.

Entrepreneurs graduate to phase three (start-up) upon making their first sale. A committee then evaluates their idea and moves them onto phase three. In this phase the incubator helps the entrepreneur grow his/her sales, find investors and strengthen their corporate structure.

Participants then present to a final committee before graduating to the fourth phase – primarily geared to networking.

Figure 1: 3IE model, stages



Companies generally stay in the programme for 18 to 30 months (including six to 10 months in the physical incubator which has space for 10 businesses).  $^{77}$ 

Similarly, incubator Octantis commits to achieving high growth in those enterprises it assists – with a target of between 35% to 50% growth in sales per year, growing firms from an annual turnover of US\$100 000 (R810 000) a year to US\$5 million (R40.5m) a year.

Octantis, which uses the model of a business accelerator and employs virtual incubation, helps entrepreneurs get more contacts by providing networks. Mentors linked to the incubator help refer entrepreneurs to customers and angel investors. One company being assisted generates US\$160 000 (R1.3 million) a month through local cellular giant Movistar.

Octantis was started by the university in 2003. About 90% of those it helps come from outside the university (Adolfo Ibáñez University, Santiago), with 70% being men. It currently assists 33 entrepreneurs from areas such as health, minerals, IT (40% of portfolio) and children's applications.

<sup>&</sup>lt;sup>76</sup> Corfo offers two lines of seed capital funding through its Capital Semilla programme set up in 2001. The first (Line One) provides up to 80% of the cost of the total project with a maximum of 6 million pesos (R100 000) for five months. The entrepreneur can spend the money on market research, business plan development, and the formalisation of the business. Only 1/6 of this money can go to the sponsor organisation. The second line (Line Two) provides up to 90% of the total project with up to 40 million pesos (R665 000), to help fund operating costs and to strengthen the business and IP protection. In this line the sponsor can take up to 6 million pesos. However the programme does not provide funding for R&D and prototyping (Magda Narczewska, 2009: 12-18).

<sup>&</sup>lt;sup>77</sup> Interview with Jaime Arnaiz A, 3IE.

The Octantis model relies on two stages: Stage 1 runs for six to nine months and consists of business design, modelling and mentorship towards the first sales. Following this is stage 2 (12-18 months) where the incubator sets up an advisory board for each business to grow sales and look for funding.

Figure 2: Octantis model: stages



The incubator has the option of taking between 10% to 15% equity, but currently only exercises this in three enterprises that it is assisting. It seeks to exit after three years. The incubator also helps entrepreneurs to obtain Corfo seed capital.

Octantis was assisting 50 entrepreneurs in 2010, but by 2011 many had failed (It's not clear exactly how many failed). The incubator believes it is better that entrepreneurs fail early than later when they have more funding and commitments to fulfil.

The incubator also helped to create an angel network, Southern Angels, which currently invests in around three projects. <sup>78</sup>

## 3.4.2 Lesson 2: Use incentives that will incubate high-growth businesses

As the South African government considers offering incentives to the private sector to set up incubators, it can do well to look to Chile where the country's small business support agency in 2011 amended the incentive it offers incubators that fund incubatees. Chile's incentive for incubators is linked to seed funding channelled through incubators to recipients; this way both incubators and incubatees receive funding – solving two central problems in business incubation. Firstly the incentive is given to incubators only if they assist incubatees. But secondly and most importantly, the new incentive places more emphasis on the quality of the business supported than was previously the case. Only by supporting good businesses to grow, will incubators be able to get funding from the government to finance their operations and the incubation of clients. This is an important lesson, for it involves incubators having to pick winners and backing these, rather than trying to support everyone and getting nowhere.

To fund innovative businesses, the government's small business support agency Corfo created InnovaChile in 2004, after Chile in the early 2000s began looking at ways of broadening the structure of its economy away from being a largely resource-dependent country. A royalty tax on mining sales helps to fund InnovaChile. While there were few incubators before 2004, the emergence of InnovaChile and Corfo seed funding for incubatees has helped create a number of new incubators.

In InnovaChile's initial years, the first funding offered by Corfo to incubators included base funding to cover basic costs (based on information presented yearly by incubators to Corfo) as well as funding based on the number of entrepreneurs incubators presented to Corfo for seed funding. In this way each incubator received about 70% of their funding from Corfo. However many entrepreneurs felt that they were not really receiving any real value from incubators in terms of mentorship and support. This has led Corfo to change the way it awards funding to incubators.

<sup>&</sup>lt;sup>78</sup> Interview with Aldo Aspil Cueta Gho, Octantis, General Manager.

Cristobal Undurraga of Corfo admits that many incubatees that received Corfo grant funding have since failed (although there are no clear figures to back this up), but points out that this is the nature of business, that some will fail and others succeed. The important thing Undurraga notes, is not how many fail, but rather how many incubated firms create exponential growth. The old Corfo policy he admits, viewed all businesses as the same. The new policy will help push incubators to assist quality, high-growth firms.

Under the new model Corfo will decrease the base funding it offers to incubators, but will now offer incubators potentially more in funding based on the number of Corfo-sponsored firms (that are presented by the incubator to the agency) that improve their sales and are able to attract third-party funders<sup>79</sup>. In the long term Corfo wants incubators to rely more on private funders and on making profits off the equity that incubators take in those businesses they assist. Corfo has chosen to cap the amount of equity incubators can take at 7%, as it does not, in effect, want incubators to rely too heavily on the public funds Corfo grants incubatees.

Corfo is aware that the new system will result in some incubators having to close, but accepts this situation. Some incubators are already looking at other ways to fund their operations – including by getting incubatees to pay for incubation services and in courting corporate sponsors. The new rules will also help reduce the number of incubators – after incubators flooded the market from 2004 to take advantage of the Corfo subsidy.

A look at one incubator in Chile explains how the new system can work. UDD Ventures in November 2011 applied for US\$2 million (R16.2m) for six years to cover operating costs<sup>83</sup>, the remaining \$4 million (R32.5m) it needs, would come from the incubator itself. UDD Ventures aims to screen 150 projects a year and incubate between nine and 12 of these (through virtual incubation). If Corfo approves UDD Ventures' subsidy, the grant money will be granted upfront for the first year. Incubators have to outline their targets pertaining to the number of entrepreneurs they want to assist and how they want to grow these entrepreneurs. If these targets are not met Corfo can cut back on the remaining funds it has pledged to the incubator.<sup>84</sup>

The new system is also helping incubators to become more focused on sectors they are good at, rather than casting around for any business from any sector. For example, because of the change in Corfo's funding structure the incubator IncubaUC prefers now to focus on making idea calls for specific areas. It has already held calls on mobile applications and IT. The idea to do this originated from Stanford University in the US. For example, because of the change in Corfo's funding structure the incubator IncubaUC prefers now to focus on making idea calls for specific areas. It has already held calls on mobile applications and IT. The idea to do this originated from Stanford University in the US.

Corfo has two lines of seed funding though its Capital Semilla programme which offers up to R100 000 for start-up funding and R665 000 for commercialising new ideas. Interestingly there are clear rules on how

<sup>&</sup>lt;sup>79</sup> Corfo is currently funding 23 or 24 of Chile's 30 incubators. As of November 2011, six or eight incubators had approached the agency for funding under the new Corfo system (Cristobal Undurraga, Corfo).

<sup>&</sup>lt;sup>80</sup> Interview with Cristobal Undurraga, Corfo.

<sup>&</sup>lt;sup>81</sup> With the change in Corfo funding to incubators, IncubaUC is approaching private sector players, such as banks, to get funding, before prize money from the new Corfo system begins to feed back to the incubator next year. IncubaUC has not exercised its option in any company to take seven percent of equity (Interview with Luis Jose Antonio and Carasco Villa, IncubaUC). Likewise Gerardo Lagos Wiesenfeld of Incubatec admits that the withdrawal of Corfo funding has been a challenge, but that the incubator had to become innovative and turn to consulting to pay the bill (Interview with Gerardo Lagos Wiesenfeld, Incubatec).

<sup>&</sup>lt;sup>82</sup> Jose Ernesto Amoros, UDD Ventures director says that as an example a small city like Concepcion (with one million people) has too many incubators with four incubators (Interview with Jose Ernesto Amoros, director, UDD Ventures).

<sup>&</sup>lt;sup>83</sup> Paul O'Toole, executive director of UDD Ventures, says the subsidy from Corfo to incubators will cover such things as staff costs (including training), workshops, trips overseas to learn best practice and marketing costs.

<sup>&</sup>lt;sup>84</sup> Interview with Paul O'Toole, executive director, UDD Ventures.

<sup>&</sup>lt;sup>85</sup> Interview with Jose Ernesto Amoros, UDD Ventures, director.

<sup>&</sup>lt;sup>86</sup> Interview with Luis Jose Antonio and Carasco Villa, IncubaUC.

much funding can be allocated to sponsor organisations such as incubators.<sup>87</sup> South Africa does not have a dedicated seed funding programme for small businesses and this may be something to consider, as the government looks to roll out more incubators. It does have a number of other funds<sup>88</sup> that finance innovative businesses, but none of these offer *small seed grants* in the same way as Corfo does.

## 3.4.3 Lesson 3: Other ways to fund incubators: royalties, equity, consulting

Incubators in South Africa are poorly funded. Even funding of R2 million a year by government to an incubator is not sufficient for a technology incubator that needs to fund equipment<sup>89</sup>. On top of this, because it is very costly to set up and run an incubator in South Africa – between R4 million and R6 million to set up a Seda incubator and R3.5 million a year to run one – government must allow incubators to source funding from other means such as taking equity in incubatees, collecting royalty fees and charging consulting fees. Enterprise development and a mooted matching grant incentive may cover some of the costs, as would the above proposed incentive Chile uses, but other financing methods must not be excluded.

In South Africa many incubators rely on government funding to survive <sup>90</sup>. Some Seda incubators have managed to leverage other funding from various stakeholders, mainly local governments, to complement their current budget. <sup>91</sup> But there are other ways too.

In Chile the private sector is quite involved in funding incubators. In fact 50% of ChileIncuba's 13 members are not funded by Corfo. In total Corfo funding accounts for 28% of 1.8 billion pesos (R30 million) in funding to the association's members (some incubators rely on up to 70% of funding from Corfo). <sup>92</sup> These incubators rely on various forms to draw funding, such as taking royalty cuts from incubatees, charging for consulting services and getting funding from corporate sponsors.

Chile and Malaysia have some interesting methods to fund incubators:

#### 3.4.3.1 Royalty fees and equity

Chile's GestaMayor<sup>93</sup> does not rely on funding from Corfo: the incubator instead looks to take a 7% to 15% royalty from products and services developed by incubatees. The incubator opts for a royalty percentage

<sup>&</sup>lt;sup>87</sup> Capital Semilla programme was set up in 2001. The first (Line One) provides up to 80% of the cost of the total project with a maximum of 6 million pesos (R100 000) for five months. The entrepreneur can spend the money on market research, business plan development, and the formalisation of the business. Only 1/6 of this money can go to the sponsor organisation. The second line (Line Two) provides up to 90% of the total project with up to 40 million pesos (R665 000), to help fund operating costs and to strengthen the business and IP protection. In this line the sponsor can take up to 6 million pesos. However the programme does not provide funding for R&D and prototyping (Magda Narczewska, 2009, p12-18).

<sup>&</sup>lt;sup>88</sup> The Department of Trade and Industry's Technology and Human Resources for Industry Programme (THRIP) offers matching grants to entrepreneurs that team up with university academics to conduct research, while the Industrial Development Corporation's Support Programme for Industrial Innovation (SPII) offers matching grants to entrepreneurs to conduct research and development (R&D). The Technology Innovation Agency (TIA) also offers funding for R&D, to cover patenting costs and at times for product commercialisation, in the form of matching loans, royalties or equity (TIA annual report, 2010/11).

<sup>&</sup>lt;sup>89</sup> Interview with McLean Sibanda, chief executive, the Innovation Hub, South Africa.

According to a 2010 survey of 10 Sabtia incubator members (Softstart BTI, Furntech, Chemin, Raizcorp, Seda Platinum Incubator, Downstream Aluminium Centre for Technology, Seda NMB ICT Incubator, Timbali Technology Incubator, Pilane Multi Sector Incubator and SmartXchange), the main challenge these incubators faced is access for funding for the incubator. All of the 10 relied on government funding, with some funding coming from the private sector for some of the incubators.

<sup>91</sup> Seda Technology Programme Annual report 2010/11.

<sup>&</sup>lt;sup>92</sup> ChileIncuba presentation by Alvaro Bustos Torreblanca, ChileIncuba meeting 29 August 2011.

<sup>&</sup>lt;sup>93</sup> The GestaMayor model (started in 2006) entails assisting entrepreneurs for one to four months with getting him or her to make their first sale by providing technical and business advice. If the entrepreneur is not able to sell to the market in the timeframe (and

rather than equity, as it would only make sense to take equity in firms that it assists that grow to a very big scale. <sup>94</sup> Malaysia only has nine private incubators. In a very few cases (MIRC or Malaysian Chinese Association ICT Resource Centre) incubators take equity stakes in companies they incubate (up to 70%) and this is seen as their main income contributor for the future. <sup>95</sup>

Infodev's Julian Webb believes good incubators will use royalties or equity to recoup mentoring and rental costs, rather than rely on subsidised rental. He believes the government, because it is not well versed in business, should rather contract the management of an incubator to a private company who could then take equity in incubatees. Seda's Jayesh Ravjee, senior manager of technology and business incubation, believes that to boost the sustainability of incubators and the quality of businesses incubators' incubatees, incubator managers should be allowed to take "social equity" stakes in incubatees. His idea is that any dividends would then be ploughed back into the incubator to help fund support such as rent and mentoring.

#### 3.4.3.2 Consulting services

Chile's virtual incubator Incubatec<sup>96</sup> draws about 25% of its funding from the consulting services it offers incubatees. The remainder of funding comes from Corfo. It has however taken equity in four businesses (at present). In Malaysia incubators draw most of their funding from government, but incubators also net some revenue through running training programmes and consulting.

#### 3.4.3.3 Corporate sponsors

Another funding option is to get corporate sponsors to host challenges and competitions from which potential incubatees are then chosen. This is what incubator 3IE does in Chile. Recently electronics giant LG paid the incubation costs for the winner of its respective business competition. In all 80% of 3IE's funding is from the university, with the remainder generated from the sales of incubatees. The incubator has the option to take 5% equity in each enterprise it assists and incubatees must pledge to repay the value of support given by the incubator 98.

after a technical of the audit is conducted by the incubator using commercial engineering students from the university), the incubator's officials then advise the entrepreneur to change or refine their idea (Interview with Alejandro Poli, Gesta Mayor).

<sup>&</sup>lt;sup>94</sup> Interview with Alejandro Poli, GestaMayor.

<sup>&</sup>lt;sup>95</sup> Global Practice in Incubation Policy Development and Implementation, Infodev, 2010.

<sup>96</sup> Incubatec, which supports about 25 to 35 companies a year. The companies (in areas such as food, ICT and agriculture) it supports are not all from the region, with about eight from Santiago and even as far afield as Bolivia.

<sup>&</sup>lt;sup>97</sup> Interview with Jaime Arnaiz A, 3IE.

<sup>&</sup>lt;sup>98</sup> This works out to be about US\$40 000 or 800 man hours (Interview with Jaime Arnaiz A. 3IE).

#### Box 2: Technology assistance from conception to commercialisation – Sirim

Malaysia's Sirim, because it is both a standards and research body, can offer a service almost unique anywhere in the world for a government-funded incubation centre – it can see the development of a product along the full cycle – from conception to commercialisation.

Today Sirim not only provides incubation space, but also provides facilities for production, laboratories for developing products such as cosmetics and toiletries and joint centres that assist SMEs with packaging and designing their products for the market. Mentoring is also offered. While Sirim was set up using government funding, it is today self-sufficient, using rentals and a fees charged to businesses to use machinery, to fund its operating costs such as incubator staff and maintenance of machinery. Sirim also owns technology and licenses this to incubatees – about three or four such deals have been done. Sirim has a product design and engineering centre which assists with rapid prototyping and fabrication and can also provide tooling technology as well as other services 100.

Sirim also has a separate company (Sirim Training Services) which runs training courses in ISO 9001: 2008 and other quality assessment systems, as well as management, technology, entrepreneurship and various other courses

#### 3.4.4 Lesson 4: Partner more with universities

University involvement in Chilean incubators is very strong and all major incubators in the South American country are either funded by, or work closely with universities. There are several advantages in having a business incubator located on a campus. These include access to in-house technology development and commercialisation, the benefit of making available experiential learning for students, faculty engagement, fostering innovation and thus contributing to economic development and society at large, partnerships with government and industry, and finally, media attention. In Chile universities often provide funding for incubators and infrastructure at no cost in light of the multiple benefits that flow to them from having an incubator.<sup>101</sup>

Rudi van der Walt, who runs the North West University's technology transfer office, believes that all universities of technology should set up their own incubators. But he says because bricks-and-mortar incubators are expensive virtual incubation is the answer. To succeed he believes incubators must integrate the four partners: the community, the entrepreneurs, the university and the government. <sup>102</sup> Jaci Barnett, technology transfer manager for the Nelson Mandela Metropolitan University, believes that incubators should be set up directly under universities and not as separate legal entities. Remaining directly under a university, will allow the incubator to draw more funding and spend less on salaries than if it is set up as under a separate entity <sup>103</sup>.

South Africa's Intellectual Property Rights from Publicly Financed Research and Development (IPR) Act, which came into effect in 2008, necessitated the setting up of technology transfer offices at universities to commercialise intellectual property developed at these institutions. This could nudge universities to get more involved in incubation. Stellenbosch University, the Nelson Mandela Metro University and the

<sup>99</sup> Interview with Mohd Ghazali Mohd Yunus.

Radio-Frequency Identification equipment which helps businesses keep track of inventory and Sirim has engineering teams that can assist with customising robotics systems, designing automotive parts and provide consulting services (Sirim corporate profile booklet).

<sup>&</sup>lt;sup>101</sup> Business Incubator Financing and Financial Services in Chile, Aruna Chandra and Magda Narczewska, 2009, p18.

<sup>&</sup>lt;sup>102</sup> Interview with Rudi van der Walt, who runs the North West University's technology transfer office, September 2011.

<sup>&</sup>lt;sup>103</sup> Interview with Jaci Barnett, manager technology transfer, the Nelson Mandela Metropolitan University, April 2012.

University of the North West<sup>104</sup> are already attempting to set up incubators. But though the act is well intentioned – in forcing universities to commercialise IP that otherwise would have remained dormant or would have been sold to overseas investors – the many restrictions<sup>105</sup> present in the act may put off investors and entrepreneurs from looking to make use of university patents.

There is also an opportunity for South Africa to build on the Technology Innovation Agency's (TIA) 12 technology stations and three tooling stations (as well as 14 biotechnology platforms) based at universities and universities of technology. The stations are involved in product testing and tooling <sup>106</sup>, but business incubation – either virtual or physical - could be used to help mentor these businesses, while attracting more innovative entrepreneurs. These stations could be integrated with technology transfer offices or work with them, to commercialise intellectual property developed in universities. Funding could be sourced from TIA, the government's various other innovation funds <sup>107</sup> as well as from venture capital funds and angel investors attracted through the venture capital tax incentive under Section 12J of the Income Tax Act.

#### 3.4.5 Lesson 5: State, business can partner to access the market

Helping incubatees access the market is one of South African incubators' biggest challenges. <sup>108</sup> Incubators in Malaysia and Chile use various methods to help their businesses to market their products and services. These are outlined below and include fairs, showrooms, market-linkage programmes and linking high-tech firms with the needs of particular customers.

Stellenbosch University is however struggling to get access to funding to set up their incubator. The aim is to use students in those companies (set up by students, professors and those outside the university) that set up in the incubator. The university has already offered space and under consideration is free or subsidised rental, with the aim of the incubator to just break-even. The university does not want to take equity fearing that this would not generate the best environment in which to encourage new businesses to set up. The idea is that 60 companies will be incubated each year, and that these firms will create 900 jobs over three years. The 10 companies the university helped set up between 1999 and 2011 to develop university IP and in which it has taken equity in each of between six percent to 100%, today employ 200 people and turnover R107m a year (Interviews with Rudi van der Walt, Jaci Burnett of the Nelson Mandela Metropolitan University, as well as with Anita Nel, Technology transfer office manager, Stellenbosch University, March 29, 2012).

Anthony van Zantwiik, a patent attorney from Sibanda & Zantwiik, noted that the act would create uncertainty for an entrepreneur with start-up company who spent years developing a patented product and was then looking to sell it. Under the act any inventor that intends to sell their intellectual property offshore would have to go through a time-consuming process involving the Reserve Bank, SA Revenue Service (Sars) and a new entity, the National Intellectual Property Management Office (Nipmo) set up under the IPR Act. An inventor would have to satisfy Nipmo that there is insufficient capacity in the country to develop or commercialise the intellectual property locally and that South Africa would benefit from such an offshore transaction. Under the act entrepreneurs working with state institutions on a new innovation would have to inform the technology transfer office located at their institution of their plans for an invention. The offices will then inform Nipmo of an entrepreneur's plans. Nipmo will then assess these plans and determine their potentials for commercialisation. Under the act each intellectual property transaction must provide the state with a royalty-free licence allowing the state to use the intellectual property throughout the world for the health, security and emergency needs of the country, if it so wishes. An inventor can become a co-owner of a patent if they have helped fund the research and development. But to become an exclusive licensee, an entrepreneur or inventor must be able to commercialise the intellectual property for the benefit of the country. Andrew Rens, Intellectual Property Fellow at the Shuttleworth Foundation, believes the act is therefore a disincentive for entrepreneurs that had patents as their unique selling proposition, because ones competition would technically be allowed to have access to the same technology. The act and the draft regulations also do not set a reasonable threshold around public research assistance, he said. Because of this uncertainty, an entrepreneur that received even 0.01% of their finance from government research funding could technically see all their intellectual property belong to the government (Bignews, "Research funding a trap for inventors", October 2009).

<sup>&</sup>lt;sup>106</sup> In the 2010/11 financial year technology stations tested 2 177 SME products. Just six SMEs secured export contracts on the tested products, while a further 51 accessed new markets. A total of 87 innovations were developed.

<sup>&</sup>lt;sup>107</sup>The Department of Trade and Industry's matching grant scheme the Technology and Human Resources for Industry Programme (THRIP) and the Industrial Development Corporation's Support Programme for Industrial Innovation (SPII).

<sup>&</sup>lt;sup>108</sup> Sabtia survey of 10 members, 23 June 2010.

#### 3.4.5.1 Fairs

While Chile's Gestamayor incubator works with local municipalities to get entrepreneurs it assists to take part in sector-themed fairs<sup>109</sup>, Malaysia's Sirim facilitates exhibitions, workshops, industry visits and seminars, while promoting entrepreneurs' products and services to both state governments and the private sector. Sirim also helps incubatees participate in local and international trade exhibitions, by referring them to event organisers. The organisation also hosts its own Sirim exhibition. Meanwhile Technology Park Malaysia (TPM) makes use of local<sup>110</sup> and international exhibitions, while incubator staff also carry out a free market validation studies which the incubator uses to assess the market into which each incubate plans to venture. Any deeper assessment study which necessitates the use of external expertise, has to be paid for by the entrepreneurs themselves.<sup>111</sup>

#### 3.4.5.2 Showrooms

South Africa's furniture incubator Furntech is planning to set up designer showrooms in three or four locations, based on a similar model used by Furntech's Swedish partner organisation. Malaysia's furniture incubator Fitec, is doing something similar already. Since 2011 the centre has been trying to get manufacturers to work together to produce one brand (the MyKitchen brand) which is then placed in a showroom and promoted to retailers. It is still early days, but customers are already buying the brand. One key challenge is that each manufacturer has different machines, which makes it difficult to maintain consistent quality of the brand. At the same time Fitec does not have enough machines at its centre for all manufacturers to make use of.<sup>112</sup>

#### 3.4.5.3 Market-linkage programmes

Malaysia's Sirim supports SMEs through the Groom Big Programme, which in 2010 benefited 41 new SMEs.<sup>113</sup> Sirim has now set up a webportal (<a href="www.groombig.biz">www.groombig.biz</a>) to serve as a catalogue for incubatees products. The portal is also part of the incubator's Groom Big mentoring programme started in 2005, which currently has 1 000 SMEs taking part.<sup>114</sup>

#### 3.4.5.4 Linking high-tech incubatees with the market:

In Chile cellphone operator Movistar and incubator Octantis jointly run a corporate incubator which involves Octantis sourcing entrepreneurs to develop Movistar applications (henceforth apps), with the cellular company providing the market for these apps. Four calls have been held for Movistar and one in 2011 for LG. The two run calls for ideas on mobile applications and technologies, with a recent one garnering 500 ideas from entrepreneurs. Workshops are then run to help the entrepreneurs to fine tune their ideas and from this five or six of the best ideas are chosen. The lucky entrepreneurs are then invited to join the incubator's two-stage business accelerator programme. In all 12 companies are now supplying Movistar with apps and technologies, from the four calls held.<sup>115</sup> Similar to the Movistar-Octantis partnership,

<sup>&</sup>lt;sup>109</sup> Interview with Alejandro Poli, GestaMayor.

About four or five depending on the sector, with two to eight per exhibition invited. Usually TPM is part of one international exhibition a year (Interview with AzraiShuib).

<sup>&</sup>lt;sup>111</sup> Interview with Azrai bin Shuib, general manager, TPM, February 3, 2012, Kuala Lumpur.

<sup>112</sup> Interview with Mohd Karmal bin Ismail, deputy director of the industrial and business development division, Mara, February 3, 2012, Kuala Lumpur.

Sirim Annual Report 2010. The Groom Big Showcase was held at Plaza Angsana, Johor Bahru from 5-7 November 2010, providing a platform for a total of 70 SMEs to demonstrate their upgraded product packaging and labelling.

The programme is specific to certain sectors, such as the food sector, and has various levels that an entrepreneur must pass through. Level one for example is aimed at basic quality improvement, while level six is concerned with getting participants to take part in an export readiness programme (Khirul Salleh Marzuki, Sirim interview).

<sup>&</sup>lt;sup>115</sup> Interview with Aldo Aspil Cueta Gho, Octantis, General Manager.

IncubaUC has a corporate incubator partnership with cellular company Claro (http://emprende.clarochile.cl). In November 2011 there were 185 users registered on the site and there are 60 projects registered, with 28 in the process.

## 4 Driving innovation

The state and private sector can also partner in other ways to increase the number of innovative entrepreneurs that operate in their respective economies. A novel scheme started in Chile in 2010 involves the government funding foreign entrepreneurs to come to the country and set up there for a short time, in the hope of stimulating the creation of more local innovative entrepreneurs. In Malaysia and Chile the state is involved in helping fund and set up angel networks. These are some of the ways the state and private sector can partner together to boost innovation.

## 4.1 Creating a venture capital industry

The Malaysian government has five government-backed venture-capital (VC) funds<sup>116</sup> and a private equity fund<sup>117</sup> which invest in innovative businesses in the country, while there are between 10 and 30 private equity and VC funds in the private sector.<sup>118</sup> The state, through Malaysia Venture Capital Management (Mavcap), has since 2001 contributed RM450 million (R1.2bn) to 11 private sector venture capital funds. These funds have sourced a further RM205.5 million (R542m) to bring the total investment in private-sector venture capital funds to RM655.5 million (R1.7bn).

Mavcap first began partnering with privately-owned VC companies<sup>119</sup> with its Outsource Partners Programme in 2001, with the aim of stimulating the nascent VC sector. The first round of investments involved Mavcap investing a total of RM100 million (R264m) – RM25 million (R66m) each into four private-sector VC funds, which have since invested in a total of 39 companies<sup>120</sup>. In 2006 Mavcap launched a second round with the state venture capital fund investing RM350 million (R923m) and private VC funds RM205.5 million (R542m) to fund seven VC funds.<sup>121</sup> Following the deduction of a two-percent fee, the VC company will take profits according to its equity percentage. Mavcap has also trained about 100 VC professionals through its Outsource Partners Programme in the last 10 years.<sup>122</sup>

The state in Malaysia has five venture capital funds, these include: BiotechCorp, Mavcap, the Malaysia Technology Development Corporation (MTDC), Modal Perdana MLSCF (which specialises in early stage investments in the areas of agriculture, industrial and healthcare biotechnology) and the Cradle Investment Programme (CIP).

<sup>117</sup> Ekuinas (Jamaludin Bujang interview).

<sup>&</sup>lt;sup>118</sup> Interview with Jamaludin Bujang, chief executive Mavcap, 27 January 2012, Kuala Lumpur.

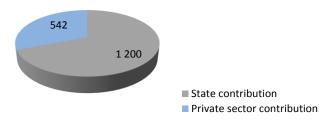
These are: iSpring Venture Management, Photonics Venture Capital, DTA Ventures Management and Expedient Equity (Mavcap 10 years of growth, 2011: 27-29).

<sup>&</sup>lt;sup>120</sup> Mavcap 10 years of growth (2011: 92).

<sup>&</sup>lt;sup>121</sup> So far RM80m was first provided to Expedient Equity Two, Ethos Capital and DTA Ventures Two. A further RM30m each was given to Musharaka Venture Management and Teak Capital, RM25m each was provided to Astra Capital and QMA Capital. While Mavcap investments made up 100% of invested funds in all of the four funds of the first round, just three of the seven funds in the second round consist of 100% Mavcap investments. In the four other funds of the second round, contributions are drawn from private sector – from VC funds and high net worth individuals (Mavcap 10 years of growth, 2011: 27-29, 92-98).

<sup>&</sup>lt;sup>122</sup> Maycap 10 years of growth (2011: 27-29).

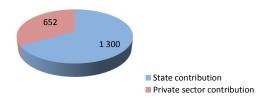
Figure 3: Co-financing investment commitments through Mavcap from 2001 to 2010 (in millions of rands)



Source: Mavcap 10 years of growth, 2011

In Chile, the government's small business support agency Corfo has since 1996 invested in 14 venture capital funds managed by private managers. The investment by the state is in the form of loans to leverage private investments. Corfo invests at a ratio of three to one and has also structured incentives to boost investments in technology-related businesses<sup>123</sup>. Another Corfo vehicle allows private investors to reduce their risk, by allowing them to purchase Corfo's shares at the halfway point of the duration of the fund <sup>124</sup>. By March of 2009, there were 14 venture capital investment funds in Chile, of which 10 had made investments – in 42 companies. A total of \$247.4 million (R2bn) in funds (at an average of \$17.7 million or R143m for each fund) has been raised, of which Corfo has contributed \$166.9 million (R1.3bn), while the private sector raised \$80.5 million (R652m). The average investment per firm has been about \$3.2 million (R26m). Over half of investments were in agriculture, education and services. Only about 10% of investments were in software.

Figure 4: Co-financing investment commitments through Corfo from 1996 to March 2009 (in millions of rands)



Sources: Bas, Tomas Gabriel and Bustamante, Ignacio, 2011. "Chilean venture capital funds, government incentives and investment in technology ventures", *International Journal of Strategic Change Management*, Vol.3, No. 1 and No. 2.

123 Corfo launched its first venture capital programme in 1996 (F1 programme) co-financed investments in a ratio of 1 to 1. In the second programme, launched in 2005 (F2 programme), the government put in invested at a ratio of 3 to 1. The total funds came to \$20m with investments of between \$1m to \$3m in each company. This scheme was followed by a third in 2006 (F3 programme) also at a 3 to 1 ratio. The difference however was that in F2, the 3 to 1 credit was given immediately, while in F3, a 2 to 1 loan is approved, and after 36 months if the fund has invested an amount equal to, or greater than 50% of the amounts involved, the fund may apply to a review of its investment portfolio. If more than 50% of the funds are invested in the companies developing innovative projects, then the venture capital fund will have the right to increase the amount of the leverage to complete a 3 to 1 ratio (Bas, Tomas Gabriel and Bustamante, Ignacio, 2011. "Chilean venture capital funds, government incentives and investment in technology ventures", *International Journal of Strategic Change Management*, Vol. 3, Nos. 1 and 2).

Corfo's K1 programme provides up to 40% of total financing to funds focused on mid-size investments. Corfo allows private investors at the halfway point of the duration of the fund to purchase Corfo shares, based on the value agreed plus interest, and if not exercised Corfo remains invested in the fund. Thus, if the fund does well, investors may buy Corfo's shares, and if it does not have the desired success, Corfo will continue to take the initial risk, therefore reducing the risk to the private investor (*ibid*).

Yet despite Chile in 2011 being rated the most attractive country for venture capital in Latin America<sup>125</sup>, VC investments in the South American companies still remain rather insignificant. Academics Tomas Gabriel Bas and Ignacio Bustamante believe that after over 15 years of venture capital support by the state, Corfo's incentives have not made the expected impact with investments in innovation and technology – which at 15% of total VC investments are low compared to developed countries such as the UK, Canada and the US where investments in innovation and technology typically make up between 40% and 66% of total VC investments. GEM studies between 2004 and 2007 also show that access to equity finance had not grown during that period 127. Significantly, experiences in Canada and the US show that interest in venture capital increases when there are tax incentives, as does investment in technological innovation. 128

Table 3: Co-financing investments by state VC funds in Chile and Malaysia

	Chile (Corfo)	Malaysia (Mavcap)
Programme launched	1996	2001
Number private funds	14	11
participating		
State contribution	R1.3bn	R1.2bn
Private contribution	R652m	R542m
Total investment	R2bn	R1.7bn
Total number investments	42	39*

Note: \*: First round only.

Sources: Mavcap 10 years of growth, 2011 and Bas, Tomas Gabriel and Bustamante, Ignacio, 2011. "Chilean venture capital funds, government incentives and investment in technology ventures", *International Journal of Strategic Change Management*, Vol. 3, Nos. 1 and 2.

The state's Technology Innovation Agency could co-invest with private-sector funds to finance small businesses and seek assistance from the private sector in managing investments. There has however up and until now been a leadership void in the government when it comes to innovation funding. The government needs to champion funding in high-growth innovative businesses and be pro-active in talking to the private sector to co-invest. However matching funding may be a better way to go than co-investing, as the latter involves duplicated due diligence and funding decisions. Most importantly any government funding should amount to a short-term, rather than long-term, intervention. The business sector is better equipped when it came to making good investment decisions, but the government can and should invest where the private sector is not willing to invest, such as in early stage biotech companies. 131

<sup>&</sup>lt;sup>125</sup> 2011 Latin American Venture Capital Scorecard (Lavca) ranked Chile ahead of Brazil and Taiwan, but behind Israel and the UK (2011 Latin American Venture Capital Scorecard).

<sup>&</sup>lt;sup>126</sup> Ibid.

<sup>&</sup>lt;sup>127</sup> Amoros, Jose Ernesto and Atienza Miguel and Romani Gianni, 2008, "Formal and Informal Equity Funding in Chile", *Estudios de Economia*, Vol. 35, No. 2, December, p. 191.

<sup>&</sup>lt;sup>128</sup> *Ibid*.

<sup>&</sup>lt;sup>129</sup> *Ibid.* Also, McLean Sibanda, chief executive of the Innovation Hub (who until 2011 was at TIA), said there was some plan when TIA was launched in 2009, for the organisation to help kick start the private VC funding sector by for example the state (through TIA) putting down R2 for every R1 the private sector invested in risky deals. However he says this has not come to fruition (Interview with McLean Sibanda, March 28, 2012).

<sup>&</sup>lt;sup>130</sup> Interview with JP Fourie, Savca chairperson, March 2012.

<sup>&</sup>lt;sup>131</sup> Interview with Stephan Lamprecht, Venture Solutions, March, 27, 2012.

# 4.2 Stimulating angel funding

In Chile and Malaysia the state is also helping to roll out angel investment networks by funding the setting up of platforms through which angel investors can engage one another to invest in deals together, and in so doing mitigate the risks of investing in the start-up sector.

In Chile the first such network, Southern Angels, was created in Santiago in 2003 around the business incubator Octantis located within the university Adolfo Ibáñez, as part of a project financed by the World Bank. Southern Angels has about 100 members who are either entrepreneurs or experienced industrial executives that want to invest in new businesses. The network's net equity is over US\$200 000 (R1.6 million). Angel member investment ranges between US\$25 000 and US\$150 000 (R202 000 and R1.2 million). Since its inception, Southern Angels has invested in 10 projects totalling \$3 million (R24.3m). The Chilean state in 2005 began offering funding to angel networks to set up through Corfo. However the number of angel investor networks has shrunk from eight in 2009, to just four or five in 2011 133. The decrease followed the restructuring of Corfo funding rules in 2011 134.

In Malaysia in 2008 the government asked the Cradle Fund<sup>135</sup> to help jump start the country's near defunct angel investing sector<sup>136</sup>. The Cradle Fund<sup>137</sup> provides seed funding in the form of grants to entrepreneurs to help develop new ideas and to help commercialise ideas<sup>138</sup>. In 2011 the Cradle Fund was assisting two angel networks<sup>139</sup> by helping one to manage its platform for investors used to source deals and bring investors together. The idea is that the angel clubs invest in Cradle clients and other businesses. To spur angel investing, the Malaysian government is also looking at adopting a VC tax incentive – similar to the UK

To be a formal member of Southern Angels, each potential investor must submit a series of documents that are submitted to the board of the network, which determines whether each applicant can become a member or not. To become a network members one has to be referred to the circle by other members. The network evaluates the projects presented to the network, via a rigorous selection process and the investments are then monitored for six months with visits and telephone contact to entrepreneurs and investors. However investment decisions are strictly the responsibility of the parties, entrepreneur and investor. An example of the angel network's investments include a Marine Farm , a tea manufacturer, a web-content accelerator, an energy-saving device, a company that markets women's sportswear, a Web 2.0 portal and a creative lighting technology company (Southern Angels website).

<sup>&</sup>lt;sup>133</sup> These include Southern Angels, Angeles de Chile, Angeles del Sur and Incured.

<sup>&</sup>lt;sup>134</sup> Interview with Luis Jose Antonio and Carasco Villa, IncubaUC.

The fund gives out up to RM150 000 for developing new ideas and up to RM500 000 for commercialising ideas. The fund adopts the accelerator model, providing a kind of virtual incubation to entrepreneurs by linking entrepreneurs with commercialisation partners and mentors, after providing them with seed funding. Between 2003 and 2010 the fund gave out RM100m in funding and from 2003 to December 31, 2011 had funded 461 pre-seed beneficiaries and 65 commercialisation deals. In all 70% of deals are in the IT sector, and most beneficiaries are men between the ages of 20 and 35, with the majority having been employed previously before seeking to become an entrepreneur. The Cradle model aims to focus more on the value of business support. The Cradle Fund has also stream-lined its application process for funding and set itself a target of commercialising projects it funds. Between 2003 and 2011 55% of projects the fund financed have been commercialized – usually after three to 18 months of receiving funding from Cradle. Every year the KPI increases by one percentage point, such that in 2012 the fund is targeting to commercialise 57% of all projects (Interview with Nazrin Hassan, chief executive of the Cradle Fund).

<sup>&</sup>lt;sup>136</sup> In the early 2000s following the setting up of the Malaysian Super Corridor (MSC) initiative, KL Angels closed in 2004 while another, First Floor Capital moved to focus on later-stage, private-equity deals.

The fund lent out RM100m between 2003 and 2010 and has received a further RM50 to lend out to businesses in 2011 and 2012. A government review will then determine how much more funding Cradle should receive (interview with Nazrin Hassan).

The commercialisation fund (CIP500) was only started in 2009, with the seed fund (CIP Catalyst) for ideas started in 2003. Each company can quality for a maximum of two funding approvals under the commercialisation fund. To be eligible for funding a company has to be in operation for at least three years and not have a total revenue of RM5m in its total history. Both funds are aimed at the ICT sector as well as biotechnology, advanced materials, renewable energy and clean tech, high-tech products and advanced manufacturing related tech.

The two angel networks are: the Virtuous Investment Circle set up in 2009 where the Cradle Fund assists in running an investment platform, and a network run by local IT association Pikom – which has 125 angels of which 50 are active investors. One angel has already made investments in at least eight companies (Interview with Nazrin Hassan).

one launched in 2005<sup>140</sup>, on which South Africa's VC tax incentive (which came into effect in 2010) is based.

South Africa, like other emerging countries, also lacks an angel-investing environment. Attempts have been made to get high-net-worth individuals to invest in small businesses by amendments to the Income Tax Act<sup>141</sup> which effectively overhaul the SJ12 venture capital tax incentive. The incentive initially failed to encourage a single venture capital company to set up and then invest in small companies, when it was introduced in 2008. An angel network, called Angel Hub, also started in 2011 by several venture capital fund managers. More of these networks are needed. Some believe the best way that the government can support the development of angel investing in the country, is to ensure that its VC tax incentive works effectively enough. The current VC tax incentive should be modified to allow tax rebates for those that place their investments directly in small businesses, rather than have them invest in a VC company (which in turn invests in a small enterprise) to qualify for a rebate. 142

# 4.3 Importing entrepreneurs to drive innovation: Start-up Chile

The idea that a government can import innovation seems rather strange – especially if it were to be adopted in a country such as South Africa which has a high unemployment rate. But Chile is doing just this with a programme called Start-Up Chile, and is betting that innovative entrepreneurs from outside Chile will enter the country and stimulate local innovation by the time they leave.

The idea behind Start-Up Chile (run by the state's small business agency Corfo) is to help create a strong entrepreneurial system in Chile and to get entrepreneurs in Chile to think globally. Both foreign and local entrepreneurs that make it onto the programme are assessed by a team in Silicon Valley (in the US). (Chile already has the benefit of being very internet savvy. <sup>143</sup>) In turn, foreign (including Chileans outside of the country) entrepreneurs are individually offered \$40 000 (R324 000) in financial support if they set up in Chile for at least a six-month period. Most of the entrepreneurs have IT ideas or run tech-based businesses, a feature that arises from the fact that IT businesses are not dependent on geographic location to operate. Many such entrepreneurs are from the US <sup>144</sup> and in a recent round, less than one in four applicants were chosen to enter the programme from the US. In supporting the scheme government has spent \$40 million

<sup>&</sup>lt;sup>140</sup> Interview with Nazrin Hassan.

The VC incentives, contained in section 12J of the Income Tax Act, aim to boost venture capital investments in small businesses, by allowing individuals and listed companies to make upfront tax deductions if they invest in venture capital companies which in turn invest in certain kinds of small enterprises. Yet, despite coming into effect in July 2009, not a single investment has been made using the incentive. The proposals were criticised by tax consultants and venture capital fund managers largely because non-listed companies such as CCs, and trusts – the usual investment vehicle of the well-heeled who want to invest in small businesses, could not benefit from the incentive. Investors are also currently not able to exercise any control in the small business the qualifying VC fund invests in. But the newly amended Income Tax Act now allows all taxpaying entities to benefit from deductions and removes the R750 000 a year threshold in respect to deductions. It has also lifted the turnover threshold of those small businesses that can qualify for investments from a venture capital company – from R10m to R20m and from R100m to R300m for a junior mining company. It also allows investors to take controlling stakes in the qualifying VC fund they invest in. In 2011, Guy Harris, of angel investors Greybeard Business Catalysts who spearheaded the group that lobbied National Treasury to overhaul the tax incentive, expected to now go ahead with setting up an angel fund on the Garden Route. Carien Engelbrecht of Aurik Business Incubator, said her organisation would set up two funds utilising the incentive (Timm, S. 2011).

<sup>&</sup>lt;sup>142</sup> Interview with Brett Commaille, Angel Hub founder, March 2012.

According to Trabajando, 40% of the population of Chile is on Facebook. Chile is the 10th country on Twitter in terms of market penetration and over 50% of the population has internet access. (http://w2.df.cl/llegan-nuevos-start-up-para-desarrollar-sus-negocios-usando-a-chile-como-plataforma/prontus\_df/2011-06-05/213021.html)

When the second round of applications, totaling 154 start-ups, was announced in September 2011, 35% of successful applicants were from the US. In all 39% of the selected start-ups fall into the enterprise software and IT industry, while the ecommerce and trade sector tails closely with 35% of the applicants. In all over 650 applications were received during the one month application period (http://www.startupchile.org/154-startups-selected-in-start-up-chiles-2nd-round-of-2011).

(R324m) over four years to back 1 000 foreign entrepreneurs who may leave Chile after six months. "This is a huge gamble" admits Corfo's Cristobal Undurraga, who is however quick to points out that any policy is in the end a gamble. He knows that a number of foreign entrepreneurs will leave after six months, but some the hope is that some will would potentially stay or create companies with Chilean branches. He country a year later and three had, as of November 2011, been able to raise capital of over \$4 million (R32.4m). Some of these entrepreneurs started two other successful start-ups.

Undurraga says that there were initially complaints from Chileans that the programme was aimed at outside entrepreneurs, but he points out that in a recent 2011 round 32% of applications were from Chilean entrepreneurs. Undurraga also points out that the programme also provides work to local firms such as architects, engineers and designers who provide services to those in the programme. Research by Corfo has also shown that each entrepreneur brings five people to visit the country. The programme is expected to boost Chile's image abroad and the programme's website currently has more hits than the official country page ChileImage. Entrepreneurs on the programme also have to visit universities and schools and give talks and mentor locals as part of the programme.<sup>148</sup>

# 5 Finance: Credit guarantees

The government and the private sector can also partner together when it comes to financing small businesses. One of the most effective ways to do this is for the state to set up a credit guarantee scheme. Banks and lending organisations that are members of the scheme then advance loans to small businesses, but because the risks of lending to this sector are very high, the state provides a guarantee to these organisations that should the loan go bad the banks will be compensated by the state. In Chile and Malaysia as we will see below, credit guarantee schemes have proved hugely successful in funding small and micro enterprises. But South Africa's credit-guarantee scheme Khula (which now falls under the Small Enterprise Finance Agency or SEFA) has been wracked with problems since its inception.

The lessons from Chile and Malaysia's credit guarantee schemes are particularly appropriate now, with the South African government having set up a single small business funding organisation (SEFA) under the Industrial Development Corporation (IDC). Khula, which now falls under the new entity, is also piloting a new financing scheme which will involve the government lending directly to small businesses, rather than via financial intermediaries and banks (using its credit guarantee scheme). The private sector has always proved more effective in lending to businesses than the government. Neglecting to fix the Khula guarantee scheme and moving to focus on direct lending may only end in disaster – with soaring default rates and substantial debt.<sup>149</sup>

Credit guarantees are the way to go. Worldwide there are more than 2 250 credit guarantee schemes in operation. Countries with the strongest policy and fiscal support for small businesses also have the highest

<sup>&</sup>lt;sup>145</sup> Interview with Cristobal Undurraga, Corfo.

<sup>&</sup>lt;sup>146</sup> "Pilot Program Offers Cash and Support for Foreign Entrepreneurs", *Stanford Business Magazine Online*, Spring 2011 (http://www.gsb.stanford.edu/news/bmag/sbsm1106/noteworthy\_shea.html).

<sup>&</sup>lt;sup>147</sup> Interview with Cristobal Undurraga, Corfo.

<sup>&</sup>lt;sup>148</sup> *Ibid*.

<sup>&</sup>lt;sup>149</sup> Hinton, Peter, "International experience of SME Banks: Lessons for South Africa", 2007, Finmark Trust.

proportion of SMEs serviced by guaranteed loans<sup>150</sup>. This section will detail various lessons from Chile and Malaysia, which run credit guarantees schemes rated by many as some of the most successful in the world together with the issues confronting Khula. The lessons on credit guarantees set out next are a continuation of lessons provided in the 2011<sup>151</sup> report by the author where lessons were drawn from India's Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme.

# 5.1 Most SMEs have access to finance in Chile and Malaysia

Small firms in Chile and Malaysia have relatively good access to finance, according to recent research figures.

In Chile in 2004, almost 70% of micro enterprises and 93% of small enterprises that operated in the formal sector had a bank loan. At the end of 2007, it is estimated that the corresponding figures had risen to 93% for micro enterprises and 100% for small businesses. This is a higher rate than in the US. <sup>152</sup> However, according to one recent study, the Chilean figures do not take into account the large number of informal micro enterprises that operate in the South American country. <sup>153</sup>

Malaysia has been ranked by the World Bank and others as one of the world's leading countries when it comes to access to finance for SMEs.<sup>154</sup> Banks contribute 85% of the total SME financing from external sources. Added to this SME approvals remain high at 85%.<sup>155</sup> Although SME bank financing increased from 31.1% to 38.5% of the total business loans between 2000 and 2010, the total SME loans given to SME sector versus the overall loans given by financial institutions is still small at about one fifth of total loan approvals. However loans given by banks to SMEs increased significantly in 2011.<sup>156</sup> But unlike in Chile, only 13.7% of small businesses use banks to finance their businesses; most such businesses rely on friends or family or their own funds (57.6%).<sup>157</sup>.

Although South Africa shares the top World Bank ranking when it comes to access to finance for businesses, just under half of small businesses are banked (46.7%)<sup>158</sup>. In the 2010 GEM Report, South

<sup>&</sup>lt;sup>150</sup> These include Japan 38%, South Korea 20%, and Taiwan 20% (Development of Corporate Credit Information Database and Credit Guarantee System, 2009, p46-47).

<sup>&</sup>lt;sup>151</sup> Timm, S. (2011b).

<sup>&</sup>lt;sup>152</sup> In the US, the Survey of Small Business Finances estimates that, in 2003, about 60 percent of all small and micro enterprises had a bank loan.

Larraín, 2008 in Industrial Policy in Chile, Manuel Agosin, Christian Larraín, NicolásGrau (2009:19-22)

These include: Number 1 by the World Bank on "Getting Credit" (Doing Business 2008, 2009, 2010); Number 5 by Consultative Group to Assist the Poor (CGAP) for "Loan accounts per 1 000 adults" (Financial Access Report 2009); and, Number 13 in 2009 (up from number 15 in 2008) by the World Economic Forum for "Ease of Access to Loans" (Global Competitiveness Reports 2008 - 2009 and 2009 - 2010).

As at end-February 2011, the SME financing outstanding stood at RM130 billion, accounting for 38.3% of total business loans (National SME Development Council, 29 April 2011, http://www.smecorp.gov.my/node/2046).

Based on Bank Negara's quarterly bulletin, loan approvals for the SMEs account for 19.3% out of total loan approvals for the third quarter of 2011. Loan applications by SMEs grew 25.2% while loan approvals rose by 27.7% year-on-year in 2011 third quarter.

Medium-sized enterprises make use of financial institutions (43.9%) as their prime source of financing while only 13.4% of micro enterprises use bank financing (31.4% use their own funds or borrow from friends or family) (SMEs Building blocks for economic growth, Normah Mohd. Aris, 2006: 8).

<sup>&</sup>lt;sup>158</sup> Finscope South Africa Small Business Survey, 2010

African entrepreneurship experts as well as business owners reported that financial support was one of the biggest challenges to entrepreneurs in the country. 159

# 5.2 How have Malaysia, Chile and South Africa performed in credit guarantee lending?

While Chile's Fogape and Malaysia's CGC (Credit Guarantee Corporation) has lent millions of rands worth of loans through their respective schemes to thousands of business owners, South Africa's Khula ground to a near halt in the 2009/10 financial year. There had been a slight recovery by 2010/11 for Khula's scheme, when it reported lending out 81 new loans to the value of R36.5 million in that period. But, the loans disbursed remain *very* low. 160

The default rate for the scheme is not recorded by Khula in its annual report, but this is likely to have improved since the 2008 Global Financial Crisis subsided. However the scheme notched up an average default rate of 42.15% between 2006 and 2010. This means that more than four in every 10 loans lent out by banks through the scheme were defaulted upon. Just as worrying is that the number of Khula guarantees has never topped 800 since the scheme was launched in 1996. <sup>161</sup>

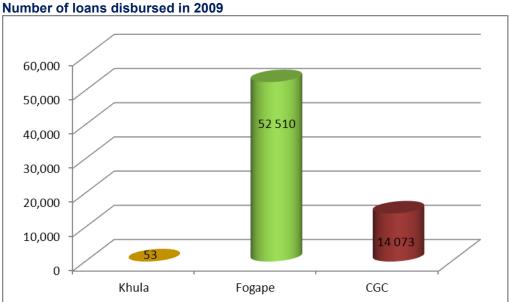


Figure 5: Performance of credit guarantees in South Africa, Malaysia and Chile:

Notes: \*Khula statistics drawn from 2009/10 financial year.

Sources: Khula, Fogape statistics from email from Alessandro Bozzo, November 24, 2011 and CGC statistics drawn from the CGC's 2009 annual report.

Chile's Fogape guaranteed \$1.9bn (R15.4bn) between 1980 and 2010, which helped firms receive finance totalling \$3bn (R24.3bn). Since 2000 and up until the middle of 2011, Fogape has guaranteed more than 350 000 operations to 145 000 small companies. The number of loans that Fogape guarantees per

<sup>159</sup> GEM Report (2010: 28, 31).

<sup>160</sup> Khula annual report, 2010/11.

<sup>&</sup>lt;sup>161</sup> Timm, S. (2011c: 29).

http://www.diariopyme.com/2011/03/fogape-adjudico-85-millones-de-ufs-en-primera-licitacion-del-ano/

http://www.estrategia.cl/detalle\_noticia.php?cod=41749

year<sup>164</sup>, has shot up from 10 147 in 2000 to 78 800 in 2010 (which then however included loans to 11 443 medium-sized and 2 698 large enterprises). The amount lent out through the scheme has increased from \$216 million (R1.7bn) in 2000 to \$3.075bn in 2010 (R24.9bn) (made up of \$1.722bn to small businesses, \$913 million to medium and \$440 million to large firms). <sup>165</sup> It was expected that U\$4bn (R32.4bn) in funding would be lent out in 2011 through the use of Fogape guarantees by banks and lending organisations. <sup>166</sup>

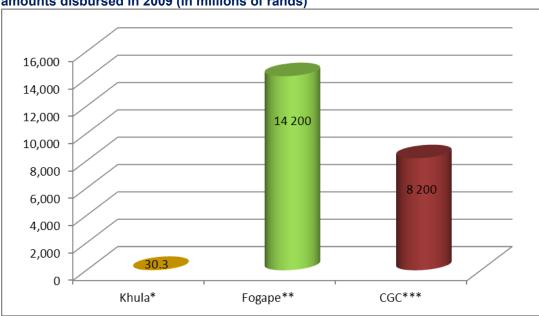


Figure 6: Performance of credit guarantees in South Africa, Malaysia and Chile: Loan amounts disbursed in 2009 (in millions of rands)

Notes: \*Khula statistics drawn from 2009/10 financial year; \*\*Fogape: \$1.75bn; \*\*\*CGC: RM3.1bn. Sources: Khula, Fogape statistics from email from Alessandro Bozzo, November 24, 2011 and CGC statistics drawn from CGC's 2009 annual report.

A 2006 study (by Benavente) revealed that Fogape's facilities have had a positive impact on those companies it guaranteed loans to, both in terms of enhanced access to bank financing, and increase in sales and profitability. About 14% of firms accessed formal finance for the first time after utilising the scheme, while the amount of finance lent out by banks to small businesses has in recent years increased by 40% because of the scheme. 167

The adoption of state schemes by Chilean banks also appears to be driving lending at Fogape. Most Chilean banks<sup>168</sup> make use of government finance schemes and believe these programmes do generate additionalities – including the state's credit guarantee scheme Fogape – mainly by attracting new clients. In

The maximum capacity of Fogape has been reached on two occasions – in 2005 and most recently in 2010. Guarantee coverage has fallen from 79% in 2001 to 77% in 2010 (68% in 2011 till April). Between January-December 2010, most of the guarantees went to the commercial sector (33.8%), services (20.9%), fishing and aqua culture (13.9%) and transport and communications (13.2%) (Fogape presentation, Alessandro Bozzo T, 2011).

<sup>&</sup>lt;sup>165</sup> Fogape presentation, Alessandro Bozzo T, 2011.

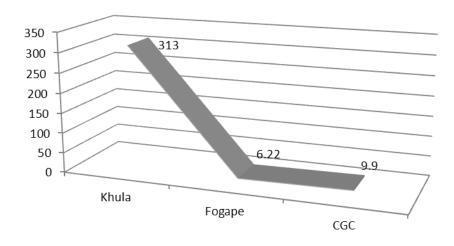
<sup>&</sup>lt;sup>166</sup> Interview with Manuel AriztiaFuenzalida, Ministry of Economy.

Also firms' sales and profits increased six percent and four percent annually respectively in the presence of a credit guaranteed by Fogape (2000 to 2004). All these effects, however, could only be identified for the Metropolitan Region (50% of the SMEs). In the outer regions statistically significant effects could be detected only on the volume of credit increased by 40% on average (Fogape presentation, Alessandro Bozzo T, 2011 and in "Chile Investment Climate Assessment", World Bank, 2007: 39, 40).

<sup>&</sup>lt;sup>168</sup> In Chile bank's main drivers to lend to SMEs are: exposure to other segments (75%), perceived profitability (63%), competition in other segments (50%), social objective (25%). The surveyors in a 2007 study interviewed eight banks: four foreign, three private domestic, and one public, which represent 79% of the banking system's total assets (World Bank, 2007).

Chile, according to a 2007 study, 75% of bankers believed that government programmes available through the bank had a positive effect on those business owners that had accessed these. 169

Figure 7: Performance of credit guarantees in South Africa, Malaysia and Chile: Default rates in 2009 (percentage)



Sources: Khula, Fogape statistics from email from Alessandro Bozzo, November 24, 2011 and CGC statistics drawn from 2009 CGC annual report.

However according to one manager in Chile's Ministry of Economy, some banks continue to demand collateral of 100% from entrepreneurs that use the guarantee scheme to take out lending, despite the guarantee being in place to deal with those who don't necessarily have all the collateral needed to take out a bank loan. Banks can ask for collateral such as business contracts and cars as well as personal collateral. Because of this, entrepreneurs using the scheme may be over-guaranteed. 170

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<sup>&</sup>lt;sup>169</sup> Bank Financing to Small and Medium Enterprises: Survey results from Argentina and Chile, World Bank (2007: 15).

<sup>&</sup>lt;sup>170</sup> Interview with Manuel Ariztia Fuenzalida, Ministry of Economy.

#### Box 3: Fogape

Fogape was launched by the Chilean government in 1980. The fund is managed by Banco Estado, but there are plans to move it to Corfo to improve the state's co-ordination of small business support. It will also help remove some consultants' concerns that Banco Estado is both a manager and bidder for funds. It

Fogape's fund of \$50 million (R405m) guarantees loans for up to 10 times the guarantee amount. Micro and small businesses can take out up to \$230 000 (about R1.9m) through Fogape and get coverage of up to 80% for loans below \$138 000 (about R1.1m), while those above \$138 000 are covered by a 50% guarantee. The average SME loan guaranteed by Fogape is about US\$7 500 (R61 000). There is usually a US\$1.1 million (R8.9m) threshold in loans the scheme guarantees. The lender is also expected to pay a commission of between 1% and 2% – although this was temporarily reduced by half during the global financial crisis.

About half of all the funds guaranteed by Fogape are for working capital, while some are also for machinery and vehicles. The coverage by the bank using the scheme depends on the history the bank has with each applicant.

A loan application is not made through the internet, but through each member bank itself and unlike with Khula, loan applications are not sent through to Banco Estado for verification before being approved. 175

In September 2008, while those taking out very small loans paid an annual interest rate of 37.7%, those taking out medium-sized loans were charged 22.2%, while the cost of credit for large loans was only 11.2%.

The initial state contribution in 1980 was about \$13 million (about R105m), with about \$15 million (R123m) transferred in resources for the Trade Guarantee Fund (Fusion) in 2000. The fund received a \$130 million (about R1.1bn) capital injection in 2008 when the Global Financial Crisis took hold. Togape was able to increase lending through the scheme by 22% after receiving this last capital injection. This capital injection offsets the probability of banks tightening collateral requirements during the crisis. During the crisis the government also passed a temporary law that allowed Fogape to provide guarantees to medium-size businesses and exporters between 2009 and January 2, 2011.

Since its inception in 1972, Malaysia's CGC has implemented 32 different schemes and guaranteed more than 400 000 loans worth \$15.7bn (R127.2bn). Between 2000 and 2010 alone the CGC backed RM10bn (R26bn) in loans. The scheme has been successful in that 100 000 of the 450 000 borrowers that have used the scheme since its inception, no longer have to depend on guarantee finance when they want to access finance. Since the scheme since its inception in loans.

<sup>&</sup>lt;sup>171</sup> Interview with Manuel AriztiaFuenzalida, Ministry of Economy.

<sup>&</sup>lt;sup>172</sup> "Industrial Policy in Chile", Manuel Agosin, Christian Larraín, Nicolás Grau (2009: 19-22).

<sup>&</sup>lt;sup>173</sup> Fogape presentation, Alessandro Bozzo T, 2011.

World Bank, Impact Evaluation of SME Programs in Latin America and Caribbean, 2010.

<sup>175</sup> Interview with Enrique Errazuriz, chief of Research unit and Oscar Gonzalez Narbona, Fogape.

<sup>&</sup>lt;sup>176</sup> Industrial Policy in Chile, Manuel Agosin, Christian Larraín, NicolásGrau (2009: 19-22).

http://www.estrategia.cl/detalle\_noticia.php?cod=41749.

<sup>&</sup>lt;sup>178</sup> Interview with Enrique Errazuriz, chief of Research unit and Oscar Gonzalez Narbona, Fogape.

http://www.diariopyme.com/2011/02/fogape-2011-%E2%80%9Cqueremos-crecer-mas-entre-las-microempresas%E2%80%9D/

Wan Azhar Wan Ahmad, Credit Guarantee Corporation Malaysia Berhad Presentation, 2011.

<sup>&</sup>lt;sup>181</sup> Interview with K Sathasivan, CGC, February 2, 2012, Kuala Lumpur.

<sup>&</sup>lt;sup>182</sup> Interview with Wan Azhar Wan Ahmad, managing director, CGC, February 2, 2012, Kuala Lumpur.

Of all loans given out in 2010, 57.9% (4 438) fell between RM101 000 (R266 000) and RM500 000 (R1.3m), while 28.9% (2 219) fell below RM100 000 and 9.2% (709) were between RM500 000 and RM1 million (R2.6m). The Corporation's credit guarantees benefited most sectors of the economy, with general business, manufacturing and agriculture sectors being the main beneficiaries.

Both Fogape and the CGC have relatively low default rates. Though Fogape's defaults <sup>184</sup> have risen from 2 932 in 2008 to 3 974 in 2010, their percentage out of the total number of loans lent out in each respective year, has fallen from 8% in 2008 to about 4% in 2010. However the decrease could be attributable to the record number of loans which were lent out in 2009 and 2010. The CGC also has a default rate (non-performing loans or NPLs) of about 4%, compared to Malaysian banks' default rate of about 2%. While the default rate looks to have edged up in recent years, the scheme's senior general manager, K Sathasivan, describes this as an unintended consequence of having to phase out one of its schemes, the Direct Access Guarantee scheme (or DAGS introduced in 2000). The large number of defaults compounded year on year and reduced volume of lending has given the appearance of a growing default rate for the CGC. He says the gross non-performing loans (NPL) rate for the DAGS is at 20%, with the net NPL rate (after the 2008 Global Financial Crisis) coming in at between 7% and 8%. <sup>185</sup>

<sup>183</sup> CGC, Annual report, 2010.

Fogape defines defaults as non-performing loans of between 90 to 425 days. Most of claims are made before the 425 days since the last maturity default (Email from Alessandro Bozzo, November 24, 2011)

<sup>&</sup>lt;sup>185</sup> Interview with K Sathasivan.

### Box 4: Making the Credit Guarantee Corporation of Malaysia financially viable

The Credit Guarantee Corporation of Malaysia (CGC) was set up in 1972 as a limited company under the Malaysian Companies Act of 1965, with the country's reserve bank and all the commercial banks as its shareholders and with an authorised capital of RM3bn (R7.9bn). The CGC assists SMEs that do not have sufficient collateral and no track record to access a bank loan. It is owned by the Reserve Bank, Bank Negara Malaysia (76.4%) and by commercial banks and finance companies (23.6%). Recently the CGC's capital was reinforced through a RM150 million (R396m) equity injection by Bank Negara Malaysia. Bank Negara Malaysia.

In 2005 the central bank unveiled a three-year plan to transform the institution into a financially sustainable organisation that is self-financing and that no longer has to depend on capital injections from the state. The state's capital injections would then be limited to specific purposes such as disaster relief or to fund specific products. The transformation plan involved the strengthening of staff capacity <sup>189</sup> and IT infrastructure <sup>190</sup>, the expansion of products <sup>191</sup> and the expansion of the corporation's sources of income. Sources of income were expanded by adjusting the guarantee fee to price for risk, by realigning investment income such that funds were outsourced to an external organisation to ensure improved returns and implementing a more affective model to rate and monitor clients.

However the introduction of an online loan application system – i-Guarantee – did not take off, with businesses still required to attach particular documents such as financial statements (while many business owners could scan and send these as attachments, they prefer to physically lodge these documents). Currently the system acts more to inform the corporation of someone's intent to use a CGC-backed guarantee. The corporation can then use this as a lead to follow up on. <sup>192</sup>

While the CGC began with one scheme, it has now expanded to offer 11 schemes<sup>193</sup>, each tailored to the particular needs of each different sector (such as construction, green business). When it decides to launch a new scheme the CGC partners with a lead bank to do so.<sup>194</sup> The various schemes have different coverage rates ranging from 30% to 100% for loans ranging between RM50 000 (R132 000) and RM10m (R26m) depending on the scheme<sup>195</sup>.

For the first nearly 30 years of the scheme's history business owners had to approach banks directly if they wanted to access a loan backed by the CGC, but in 2000 the CGC began offering direct finance through its branches via the Enhancer Direct scheme. The scheme offers a 100% guarantee for loans of between RM500 000 (R1.3m) and RM50m (R132m), but to qualify business owners must be between

<sup>&</sup>lt;sup>186</sup> Total assets as of December 2005 were at \$1.32bn (Development of Corporate Credit Information Database and Credit Guarantee System, 2009: 77-80).

Development of Corporate Credit Information Database and Credit Guarantee System (2009: 77-80).

<sup>188</sup> CGC, Annual Report, 2010.

Training on securitisation of portfolio was carried out by German development bank KfW.

A new workflow system was introduced in 2007 which uses various layers to show what stage a loan is at and in this way acts as an early-warning system. It is also linked to a back-office system. The new system has allowed for more efficient, closer monitoring of accounts than in the past and better tracking of non-performing loans of banks (Interview with K Sathasivan).

Portfolio guarantees were introduced as was equity financing (in partnership with UK firm Auroes). With portfolio guarantees, guarantees are approved in an average of three days as only a desktop review needs to be carried out by the CGC before granting the guarantee. RM700m in loans (of the RM2.8bn total) have been backed by portfolio guarantees since they were introduced in 2010 One bank has given out at least four tranches, while two or three more have completed their first tranche. Mr Sathasivan believes portfolio guarantees will drive CGC lending (Interview with K Sathasivan).

<sup>&</sup>lt;sup>192</sup> Interview with K Sathasivan.

The CGC's schemes are listed as follows: Credit Enhancer Scheme (Enhancer), Credit Enhancer-i Scheme (Enhancer-i), SmallBiz Express Scheme, Small Biz Express-i Scheme, Direct Access Guarantee Scheme (Dags), Direct Access Guarantee Scheme-i (Dags-i), Direct Access Guarantee Scheme – Start-Up (Dags Start-Up), Direct Bank Guarantee Scheme (Direct BG), Flexi Guarantee Scheme (FGS), Franchise Financing Scheme (FFS) and the Green Technology Financing Scheme (GTFS) (2010 Annual Report).

<sup>&</sup>lt;sup>194</sup> Interview with Wan Azhar Wan Ahmad.

<sup>195</sup> Funds and schemes for small and medium enterprises promoted by the government of Malaysia, Bank Negara Malaysia, 2009.

<sup>&</sup>lt;sup>196</sup> Today the CGC has 16 branches – based in nearly every one of the country's 13 states.

25 and 65 years old and have at least three years business experience. An annual guarantee fee of 0.75% to 5.75% is charged on each loan and loans are repayable to banks after five years. <sup>197</sup> The scheme offers an alternative way for business owners to access loans and for the corporation to make it easier to get finance <sup>198</sup>. This particular scheme provides SME borrowers with a 100% guarantee. Applications are submitted to the branch which then carries out a site visit of the borrower. A credit assessment is then done and submitted to HQ for approval. Finally, if approved, funding is disbursed through a member bank. <sup>199</sup>.

The SME Credit Bureau was established by CGC in July 2008 to assist SMEs to build, maintain and enhance their credit standing, and to ultimately facilitate wider and easier access to financing. The bureau provides credit reports which allow SMEs to become aware of their own credit standing and improve their credit worthiness. It also provides reports, which helps the CGC, banks and suppliers to the business to review their customer's credit standing and ratings. Added to this, the bureau provides credit monitoring services, which is a cost effective mechanism to alert business owners of their company's rating and to any adverse changes to their company's information.

# 5.3 Lessons from Malaysia and Chile

There are several lessons that South Africa's Khula guarantee scheme can learn from Fogape and CGC; these include ways to drive lending through innovative measures (such as an auction system), the reduction of red tape in the claims process and the improvement of training at banks and trust between banks and the credit guarantee scheme. We detail these below.

## 5.3.1 Lesson 1: A unique auction system can lower the coverage rate

Fogape's auction system<sup>200</sup> has led to decreasing coverage rates – average coverage rates have fallen from 80% when initiated in 2000, to 62.2% in 2010<sup>201</sup>. Bidding takes place four to six times per year. Only supervised financial institutions can participate. Financial institutions participating in the system are responsible for analysing the risk of loans and respecting the conditions set by Fogape.<sup>202</sup> In all, 16 financial institutions and 10 mutual guarantee societies participated in an auction in September 2011<sup>203</sup>.

The idea is that the bank competes for the resources and that the competition between banks allows for the funds to be better distributed as coverage rates are reduced – freeing up the amount of guarantees available. The more competition there is, the more the coverage rate is reduced. Banks are then assigned funds according to the coverage rates they can offer. Most banks get access to the available funds. If the banks do not lend out all the funds they have been assigned they get penalised on the amount of funds

<sup>&</sup>lt;sup>197</sup> Enhancer Direct pamphlet, CGC.

LL Koong, from ACCCIM said the CGC wanted to cut down on the bureaucracy and time it took to process loans backed by guarantees – hence the idea for the new scheme. Through this scheme SMEs can access loans in one week, rather than in one month as with other CGC backed schemes. SMEs also do not have to have collateral and the interest charged is also less than ordinary schemes (Interview with LL Koong).

<sup>&</sup>lt;sup>199</sup> Interview with K Sathasivan.

<sup>&</sup>lt;sup>200</sup> In 2005 a similar auction system, modeled after the Fogape auction system, was adopted in Mexico.

<sup>&</sup>lt;sup>201</sup> Email from Alessandro Bozzo, November 24, 2011.

<sup>&</sup>lt;sup>202</sup> Fogape presentation, Alessandro Bozzo T, 2011.

<sup>&</sup>lt;sup>203</sup> Interview with Alessandro Bozzo, Fogape's deputy manager.

they will be able to obtain in the next bidding round.<sup>204</sup> In 2005, lending institutions typically used 85% of the resources available to them. In order to increase usage, Fogape recently required that a contracting financial institution must use 90% of the guarantees awarded to them. No financial institution can receive more than 66% of the total resources bid.<sup>205</sup>

## 5.3.2 Lesson 2: Use equity and quotas to drive banks to adopt a scheme

When Malaysia's CGC was set up in 1972 banks owned over 70% of the organisation<sup>206</sup>, while the remaining stake was held by the central bank (Bank Negara). The adoption of the scheme by banks was driven, in the beginning, by a central bank provision which required banks to lend 3% of their total deposits to SMEs. This was then increased to 5% and then to 10% in the years following this. By 1981 the government stipulated that 12% of banks' total lending had to go to SMEs, with 5% to be taken up by lending under the CGC. In the 1990s amid increasing liberalisation moves under the WTO, the quota provision was removed.

In 1994 the central bank began increasing its share in the CGC through a number of equity injections <sup>207</sup>. The largest of these portions was the RM1bn (R2.6bn) capital injection in 2000. With this the central bank became the corporation's majority shareholder, such that today it holds about 80% of the corporation. Following the 1997/98 Asian market crash, the central bank was keen to play a greater role in financing SMEs, particularly after banks began tightening lending practices in the wake of the Asian crash.

Until 2006 only banks with equity in CGC could participate in the organisation's schemes, but the corporation has since expanded this to allow all banks to participate, as well as the state-owned SME bank and Agro Bank, development finance institutions and organisations offering Islamic finance. Today despite being left with only a 23% share in the CGC, the banks continue to make use of the scheme, driven by the confidence they have that the scheme will honour claims and because the banks view the SME sector as a growth sector – particularly because it is well supported by the federal government.<sup>208</sup>

## 5.3.3 Lesson 3: Ensure a fast claims process

Speedy payments of claims by a credit guarantee scheme to member banks is vital if a scheme is to garner confidence from participating banks and lending organisations. If the scheme takes too long to pay out loans or turns down too many claims for settlement, banks loose hope that the scheme will come to their aid when loans go bang. This is especially pertinent for Khula, where over two in five loans were defaulted upon by businesses between 2006 and 2010. Khula requires a bank to first seek a default judgment against

<sup>&</sup>lt;sup>204</sup> In every auction Fogape distributes resources for three types of credit guarantees: (i) 50% of total resources go to short-term loans; (ii) 30% goes to long-term loans, exporters and emerging companies; and (iii) the remaining resources go toward other credit. Tenders are selected based on the coverage rates proposed by lending institutions – lower coverage rates are selected before higher coverage rates. Once the tenders have been accepted, Fogape establishes a contract with the winning financial institution fixing the coverage and commission rates, and outlining the contractual obligations of both parties in the case of default. Once the contract is concluded between Fogape and the lending institution, loans based on the guarantees must be distributed to borrowers within a two month time frame. If during that period, the guarantee is not used, Fogape calls for a new bid. (http://www.diariopyme.com/2011/03/fogape-adjudico-85-millones-de-ufs-en-primera-licitacion-del-ano/)

Llisterri J., Rojas A., Mañueco P., López V., Garcia A., (2006); «Sistemas De Garantía De Crédito En América Latina», Banco Interamericano de Desarrollo, Washington, DC in OECD report, pp. 12-13).

Today 10 commercial banks, eight or nine Islamic banks and less than five development finance institutions, make use of the scheme (Interview with K Sathasivan).

<sup>&</sup>lt;sup>207</sup> The capital injections were: RM4m, RM10m, RM30m, RM28m in successive years and RM1bn in 2000.

<sup>&</sup>lt;sup>208</sup> Interview with K Sathasivan.

a business owner before it can lodge a claim, which can take between one to three months to obtain or up to five years, according to one banker.<sup>209</sup>

But while it can easily take a year for Khula to settle a claim with banks<sup>210</sup>, at Chile's Fogape it can take less than one month for a claim to banks to get paid out. This is because Fogape pays out on presentation of proof that legal proceedings are under way in court, rather than in the case of Khula, insisting that banks secure a default judgment against the principal debtor as well as all sureties in court against the defaulting business owner before they can lodge a claim.

In case of a default of the debtor, the creditor institution may request Fogape to make a settlement within 425 days from the date of expiration of the respective credit. Fogape must reimburse the respective lending organisation within 15 working days from the date of the request based on the participating institution – or it must reject the request for payment within same within 15 days. To lodge a claim lending institutions must submit six documents to Fogape<sup>211</sup> and about 10% to 15% of all claims are rejected by Banco Estado. Sometimes this is because the bank cannot produce evidence such as invoices to back up its claim or because the bank has not made a filing in court for a judgment against the entrepreneur.<sup>212</sup>

At Malaysia's CGC claims are typically settled within three months of an application for claim settlement being made by the member lending institution. Banks usually opt for restructuring a loan when a borrower defaults, but if it opts to lodge a claim and this is then approved by the CGC, one of two options can be adopted by the member bank: either the CGC can collect the debt itself (subrogation) or it can hand the collection responsibility to the member bank that put in the claim. In the second option the claim monies are placed in an Escrow account. Once the money is placed in such an account it cannot be accessed by the bank until the recovery process is completed. In loans which were originated by the CGC (DirectX) the corporation takes over the recovery process itself.<sup>213</sup>

## 5.3.4 Lesson 4: Use systems to reduce risk when lending

The use of credit-risk systems can also help schemes, such as Khula, to mitigate risks. The CGC makes use of three important systems to mitigate risk and make it easier for credit providers to make a decision about whether to grant SMEs loans or not. The CGC usually takes 14 days to approve a guarantee, following vetting by a member bank and the corporation itself. These three systems are:

- The Central Credit Reference Information System (CCRIS): Set up by the central bank and recognised as one of the best systems in the world for assessing the creditworthiness of SMEs.
   All banks are required to supply the central bank with data on loans in order for the system to calculate the risk of lending to SME clients.
- The Credit Tip-off System (CTOS): Run by a private institution, the CTOS reports on any legal proceedings lodged against businesses or individuals in Malaysia.

Though Khula aims to settles a claim within 30 days of receipt of all the information, banks first have to secure a default judgment against the principal debtor as well as all sureties in court against the defaulting business owner before they can lodge a claim. However, according to one banker, who oversees Khula guarantee lending, "it rarely takes less than a year to pay out claims". Added to this banks have to submit five or six different pieces of documentation along with each claim form (Timm, S. 2011:33).

<sup>&</sup>lt;sup>209</sup> Timm, S (2011: 33).

<sup>1 -</sup> Copy of the promissory note with Fogape's coverage; 2 - Verification of the eligibility of the debtor; 3 - Verification of the use of the provided resources; 4 - Copy of Executive demand and notification to the debtor; 5 - Checking that financing is consistent with the information in the Fogape system entered by the financial institution; and, 6 - Application for the recovery of the guarantee.

<sup>&</sup>lt;sup>212</sup> Interview with Enrique Errazuriz, Chief of Research unit and Oscar Gonzalez Narbona, Fogape

<sup>&</sup>lt;sup>213</sup> Interview with K Sathasivan.

• SME Credit Bureau: Set up by the CGC as part of its 2005 transformation plan and accredited by Dunn & Bradstreet which also provide technical support, the credit bureau aims to provide SME lenders with accurate credit ratings<sup>214</sup> which will help in accessing finance from CGC. A rating shows the probably of whether a borrower will default and the credit bureau also details the areas where an SME can improve to obtain a better rating and so be able to access finance more easily.<sup>215</sup> The CGC however has not carried out any study on whether the setting up of a credit bureau has helped decrease the scheme's rate of defaults.

#### 5.3.5 Lesson 5: Strong bank-scheme relations

In South Africa, Khula can do well to increase communication between ordinary bankers and the scheme's officials. South African banks noted in a 2011 study that the number of meetings between its staff and Khula staff had dwindled in recent years.<sup>216</sup>

Banco Estado trains 1 500 ordinary bankers (and account executives) in some 30 banks and factoring houses across the country, about the scheme and its practices. The training is covered by Banco Estado. 217

An advisory committee with representation from the four banks, the nation's largest three employers' associations of small and micro businesses, the Ministry of Economy and Supervisor Fund meets quarterly to discuss the fund. There is also a monthly inter-bank meeting sponsored by Fogape, where the results of operations by each institution financial resources of the fund are presented and discussed. According to Fogape, one of the scheme's successes has been in terms of the development of an independent and professional administration and the running of regular training sessions and active coordination with financial institutions and the final beneficiaries.<sup>218</sup>

# 6 Public e-procurement portal

The state can help more small businesses become buyers if it uses privately developed IT systems as a platform to buy the goods and services it needs. Evidence from Chile's state e-procurement portal reveals that the web system has helped the state procure more goods and services from small businesses – without any risk of distorting the market by administering set-asides for SMEs. In South Africa efforts to put set-asides in place (which other countries like the US and Brazil already have) have been blocked by the National Treasury over concern that set-asides for specific entity types are unconstitutional<sup>219</sup>. It is why a

A rating is based on information supplied by the registry of companies, utilities bills (such as telecoms, electricity bills) and banks. Like India which through the NSIC there currently has a credit rating subsidy, the CGC has mooted the idea for the government to provide a similar subsidy to SMEs in Malaysia. K Sathasivan believes that banks will take to using the bureau's credit ratings if they provide information and data not readily available to banks through any other means (Interview with K Sathasivan).

<sup>&</sup>lt;sup>215</sup> Interview with K Sathasivan.

<sup>&</sup>lt;sup>216</sup> Timm, S. (2011: 33).

<sup>&</sup>lt;sup>217</sup> Interview with Enrique Errazuriz, chief of Research unit and Oscar Gonzalez Narbona, Fogape.

<sup>&</sup>lt;sup>218</sup> Fogape presentation, Alessandro Bozzo T, 2011

<sup>&</sup>lt;sup>219</sup> The National Treasury points out that the policy would run counter to Section 217 of the Constitution which reads: "When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods and services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective" (Timm, Stephen, 2009. "Treasury reigns in state", Bignews, June)

2008 cabinet-approved plan to allocate 85% of spend on 10 key goods and services to small businesses never took off. E-procurement might be the answer for the state it if wants to boost SME procurement.

# 6.1 Rising small and micro enterprise procurement

Chile's e-procurement system, ChileCompra, was adopted by the government to help it to improve the management of public resources <sup>220</sup> allocated to buying goods and services from private suppliers and at the same time offer a more open and transparent tender system. <sup>221</sup> The agency falls under the Ministry of Finance and began operating in 2003. Since 2004 to 2011, the percentage of procurement from small and micro enterprises through ChileCompra has increased from 23.8% to 41%. <sup>222</sup> In 2007 a further 10% of the value of goods and services were sourced from medium-sized enterprises through the portal. <sup>223</sup> Added to this nine in every 10 tenders advertised in 2010 on the portal were awarded to micro, small and medium enterprises. <sup>224</sup>The top two products and services sold by small firms through the portal are construction-related services such as painting, renovation and carpentry, followed by professional services such as legal and accounting services. <sup>225</sup>

The increase in the value of goods and services that the state purchases from small and micro enterprises has come about after more small firms began turning to the state as an alternative market when the global financial crisis hit in 2008. Business owners in Chile have also adapted well to selling their services and goods through the internet as the Chilean population has a high access to internet and good rate of use of Twitter, Facebook and other internet applications.<sup>226</sup>

Currently 850 public agencies<sup>227</sup> source goods from more than 100 000 active small and micro-enterprise suppliers<sup>228</sup> throughout the country amounting to transactions totalling \$6bn (R49bn). While the e-procurement portal in 2010 helped save the state about \$230 million (R1.9bn)<sup>229</sup> or the equivalent of about 3% of the Chilean government's procurement costs<sup>230</sup>, it has also helped promote greater transparency, efficiency and access to this market for all.<sup>231</sup>

<sup>&</sup>lt;sup>220</sup> Chile's state procurement accounts for between eight percent and 10% of national GDP. Posted on Tuesday, June 24, 2008. http://www.eldetallista.cl/portal/econom\_a/el\_mercado\_de\_las\_compras\_p\_blicas\_y\_las\_micro\_y\_peque\_as\_empresas

<sup>&</sup>lt;sup>221</sup> "Disappointment and Challenge: Policies Addressing the Micro, Small and Medium Size Enterprises in Chile" by Luis A. Riveros and Mario Morales, in *The Policy Environment for the Development of SMEs* (2007: 62).

<sup>&</sup>lt;sup>222</sup> Eliminating barriers for MSE's in the public procurement marketplace of Chile, David Escobar (2008: 1000-1002, 1007).

<sup>&</sup>lt;sup>223</sup> Interview with Guillermo Burr Ortuzar, ChileCompra.

<sup>&</sup>lt;sup>224</sup>http://www.eldetallista.cl/portal/historias\_de\_emprendedores/director\_de\_chile\_compra\_mipymes\_son\_la\_base\_del\_aumento\_a 110000 empres 0

<sup>&</sup>lt;sup>225</sup> More statistics are available from www.analiza.cl. (Interview with Guillermo Burr Ortuzar, ChileCompra)

<sup>&</sup>lt;sup>226</sup> Interview with Guillermo Burr Ortuzar, ChileCompra.

However while some state agencies don't buy goods and services through the portal, public works contracts are not placed through the portal (Interview with Guillermo Burr Ortuzar, ChileCompra).

<sup>&</sup>lt;sup>228</sup> Currently 400 000 small and micro firms are registered on the portal, of which 100 000 currently have purchasing orders.

<sup>&</sup>lt;sup>229</sup> ChileCompra itself is staffed by only around 100 employees (from "Eliminating barriers for MSEs in the public procurement marketplace of Chile", David Escobar, 2008: 1000 to 1002, 1007).

<sup>&</sup>lt;sup>230</sup> Interview with Manuel Ariztia Fuenzalida, Ministry of Economy.

<sup>&</sup>lt;sup>231</sup> ChileCompra Strategic Plan 2010-2012, p7.

# 6.2 How it works

Whenever a parastatal needs to purchase goods or contract a service, its officials complete a request on the website indicating the specifics for the respective tender. The system then automatically sends an email to all suppliers registered on ChileCompra. The site also provides contact details of the relevant officials at the department or parastatal submitting the tender. Suppliers' bids are not successful, they are also given clear reasons why they did not win the tender. Suppliers can also see the results of the tender, who participated, the proposals, the economic and technical scores and who won. This all helps to reduce corruption. Suppliers can also see the results of the reduce corruption.

ChileCompra together with various municipalities has also set up a number of free internet and business information access points across the country that entrepreneurs can access to learn more about how to navigate through the e-procurement portal. These 15 centres are usually co-hosted by municipalities which provide the building or space, while ChileCompra pays the cost of running the centres. In all 90% of small and micro enterprises that register on ChileCompra use the system. These centres also conduct IT assessments on entrepreneurs and lectures that prepare them for preparing bids for public tenders. <sup>234</sup>

# 6.3 No need for set-asides with e-procurement

Chile opted for a system that would maximize the participation of all the suppliers, rather than mandate set-asides, as the former is a more inclusive system. According to Escobar (2008) set-asides present "serious dangers", by introducing distortions that could lead to inefficient purchases being made. He argues that a more open system also helps empower small suppliers by offering clear procurement guidelines, free registration, while minimising the necessary documentation needed. Registration, he says, also allows providers to use the same documentation in multiple purchase processes, which also reduces the time that business owners have to spend on completing documents.<sup>235</sup>

<sup>&</sup>lt;sup>232</sup> Chile's Government Procurement E-System, Claudio Orrego, with Carlos Osorio and Rodrigo Mardones, UN, undated.

<sup>&</sup>lt;sup>233</sup> Interview with Guillermo Burr Ortuzar, ChileCompra.

<sup>&</sup>lt;sup>234</sup> *Ibid*.

<sup>&</sup>lt;sup>235</sup> Eliminating barriers for MSEs in the public procurement marketplace of Chile, David Escobar (2008: 1002-1005).

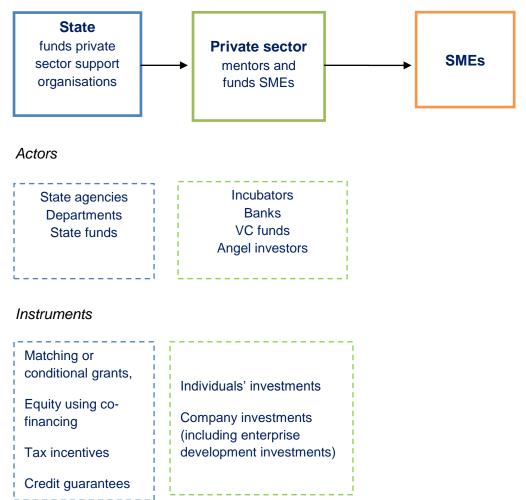
# 7 Conclusion

In both Chile and Malaysia the state and private sector (banks, financial institutions, incubators, angel investors and venture capital funds) are partnering together to supply highly effective support to small businesses. In both countries the state's assistance is boosted by a capable bureaucracy which uses policies to design various incentives to crowd in private sector participation.

The private sector (better trained, motivated and more business-minded) is better equipped to deal with small businesses than the state. However the private sector often lacks a culture of risk taking necessary to lend to and support small businesses. The private sector may have the necessary resources to support SMEs, but these often have to be unlocked by the state taking the lead in investing in and supporting small enterprises.

In summary, a state-private sector model could look something like what is depicted in **Figure 8** below:

Figure 8: State-private sector model



In this model, the state (though its various agencies, departments and development finance institutions and funds) funds private sector support organisations (such as incubator organisations, banks and other lending organisations, as well as venture capital funds and angel investors), which in turn mentor and fund SMEs.

The instruments the state can use to crowd in the private sector include: the use of matching or conditional grants (such as Corfo's grants to incubators which are conditional on incubators creating high-growth entrepreneurs), equity financing using co-financing (as employed by Corfo and Malaysia's Mavcap), tax incentives (such as South Africa's existing Section 12J of the Income Tax Act) and credit guarantees. These can then be used to leverage investments from private individuals and companies which can then together, with these instruments of the state, invest in SMEs. One other instrument could include setting up a fund to finance innovative and high-impact project proposals from the private sector – this has already been mooted by the Department of Trade and Industry<sup>236</sup>.

The Department of Trade and Industry has already outlined its intent to partner more with the private sector and to incentivise its small business support agencies and the private sector to develop innovative and high-impact support programmes for small businesses. However the state should also take the lead in devising clear plans to partner with the private sector in the areas of incubation and business support, access to finance and market access.

In taking the lead the state can boost business and incubation support to SMEs by:

 Partnering with business support agencies and incubators by setting up matching funds to crowd in the private-sector. The state must also use monetary incentives which encourage the private sector to support high-growth businesses that grow their sales, create jobs and are able to attract private investment.

In improving access to finance for SMEs, the state can:

- Partner with banks by recapitalising the Khula guarantee scheme and by adopting techniques
  to get buy-in from banks (such as cutting red tape in claims processes, holding workshops with
  ordinary bankers, getting banks to take equity in the guarantee scheme, holding auctions
  among banks which require a certain amount of funding to be disbursed or finally implementing
  priority lending targets).
- Partner with business angels by funding angel investment networks (through for example the Technology Innovation Agency) and ensuring that the revised venture capital tax incentive of 2011 (12J of the Income Tax Act) is effective in seeing venture capital companies being set up and lending to small businesses.
- Partner with private venture capital companies by co-financing investments (through for example the Technology Innovation Agency) with these funds that invest in high-impact innovative companies.

The Department of Trade and Industry together with the National Treasury should also explore the benefits of setting up an e-procurement system for the buying and selling of state goods and services. This should be coupled with the rollout of internet access points across the country – with particular focus on geographic areas where the majority of small enterprises are clustered.

Together the state and the private sector can help to create more focused and effective support for SMEs.

<sup>&</sup>lt;sup>236</sup> Zikode, Sipho and Mohoto, Mojalefa, 2012. "Presentation to the Select Committee on Trade and International Relations: Review of Government Support to SMMEs", February 8).

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# 9 Appendix 1: Definition of SMEs

The respective definitions used by the South African government (Appendix Table 1), the Chilean government (Appendix Table 2) and the Malaysian government (Appendix Tables 3 and 4) to classify small, medium or micro enterprises, appear in three tables below:

Appendix Table 1: South Africa: National Small Business Amendment Act of 2003 (Selected main sectors\* for SMMEs by annual turnover\*\*)

	Micro	Very small	Small	Medium
Manufacturing	R0.2m	R5m	R12m	R51m
Wholesale trade, commercial agents and allied services	R0.2m	R6m	R32m	R64m
Finance and business services	R0.2m	R3m	R13m	R26m
Community, social and personal services	R0.2m	R1m	R6m	R13m

Notes: \* The criteria vary depending on the sector (of which the National Small Business Amendment Act of 2003 prescribes 11 different ones: Agriculture; Mining and Quarrying; Manufacturing; Electricity, Gas and Water; Construction; Retail and Motor Trade and Repair Services; Wholesale trade, commercial agents and allied services; Catering, accommodation and other trade; Transport, storage and communications; Finance and business services; Community, social and personal services).

\*\* The size of a business in South Africa is chiefly defined by its number of employees: Micro: 0 to 4 employees; Very small: 5 to 9 employees; Small: 10 to 49 employees;

Medium: 50 to 200 employees Source: South Africa (2003).

#### Appendix Table 2: Definition of small businesses in Chile

	Micro	Small	Medium	Large
Value of annual	Up to \$110 000	\$110 000 to	\$1.160m to	Over \$4.6m
turnover		\$1.160m	\$4.6m	

Source: Fogape presentation, Alessandro Bozzo T, 2011

Appendix Table 3: Definition of small businesses in Malaysia for manufacturing, manufacturing-related services and agro-based industries

	Small enterprises	Medium-sized firms
Annual turnover	RM250 000 and less than	RM10 million and RM25 million
	RM10 million	
Employees	5 and 50	51 and 150

Source: Daisy KeeMui Hung et al. (2010).

Appendix Table 4: Definition of small businesses in Malaysia for the services, primary agriculture, and information & communication technology sector

	Small enterprise		Medium-sized firms
Annual turnover	RM200,000 and	less than	RM1m and RM5m
	RM1 million		
Employees	5 and 19		20 and 50

Source: Ibid.

# 10 Appendix 2: List of incubators visited in Chile and Malaysia

What follows below is a short list on the incubators that the author visited while in Malaysia and Chile.

# 10.1 Incubators in Chile

While in Chile the author visited and met with seven incubators – five in Santiago and one each in Temuco and Concepcion.

#### 10.1.1 UDD Ventures (Santiago)

A business accelerator with centres in Santiago and Concepcion and started in 2007. By 2010 about 200 companies had been started by alumni of UDD.<sup>237</sup>

## 10.1.2 Incuba UC (Santiago)

Incuba UC is the result of merger of Dictuc and Ventana. VentanaUC was started in 2004 as the Center of Incubation and Acceleration Project, created by the Catholic University of Chile. IncubaUC has raised \$ 2.5m in state funds and supported over 100 projects. It has also raised a further \$3 million since 2009 from private investors to support enterprises in conjunction with Angel Investors Network Dictuc. On the other hand, IncubaUC has formal access platforms for commercialization and technology transfer with the several institutions in major world markets like the US, Europe and Asia.

# 10.1.3 Octantis (Santiago)

Octantis business accelerator is based at the Adolfo Ibáñez University. Between 2003 and 2010, Octantis has helped source funding for 4 500 business prospects, supported more than 250 enterprises, created 108 new companies. In 2008, 27 new companies were created and 67 projects and companies supported with a combined turnover of \$30 million (R243m). Added to this 14 international patents were held in 12 companies. Octantis also has the largest network of angel investors in Chile, called Southern Angels, which has invested \$4.9 million (R40m) in 11 companies and has also helped set up other angel investment networks in Latin America. 239

#### 10.1.4 GestaMayor (Santiago)

Gesta Mayor was started in 2005 under the wing of the Universidad Mayor.

## 10.1.5 3IE (Varapaiso)

This incubator is based at Santa Maria University in Valparaiso.

<sup>&</sup>lt;sup>237</sup> http://www.udd.cl/2010/05/udd-ventures-celebra-200-empresas-creadas-por-ex-alumnos/

<sup>&</sup>lt;sup>238</sup> IncubaUC website.

<sup>&</sup>lt;sup>239</sup> Octantis website.

# 10.1.6 Centro de Desarrollo de Empresas (Concepcion)

Based at the University of Bio-Bio, in Concepcion and started in 2003, the incubator organisation is a subsidiary of the university's technology transfer division. Its two incubators can accommodate a total of 15 companies.

## 10.1.7 Incubatec (Temuco)

Based at the Universidad La Frontera, Temuco, Incubatec was started in 2001. It has offered virtual assistance to businesses, in the area of manufacturing of cream liqueurs and creams, to agricultural and agribusiness sectors to clean energy.

# 10.2 Incubators in Malaysia

While in Chile the author visited and met with seven incubators – five in Santiago and one each in Temuco and Concepcion.

## 10.2.1 Sirim (Kuala Lumpur)

Sirim Berhad, formerly known as the Standards and Industrial Research Institute of Malaysia (Sirim), is owned by the Malaysian government. Sirim has a number of incubators across the country, which focuses primarily on advanced manufacturing technology<sup>240</sup>, environmental and renewable energy research and technology, industrial nano-technology and biotechnology. The main incubator was first launched in 1986 and is now located in Sepang, near Kuala Lumpur.

# 10.2.2 Technology Park Malaysia (Kuala Lumpur)

Technology Park Malaysia (TPM) was started in 1996 and is a 700 acre technology community within Kuala Lumpur. The park is home to more than 140 technology-driven companies, that contribute about 1.2% to the country's GDP and employ about 9 000 people. The TPM's three incubators have 104 incubator spaces. Most of the incubatees (70%) are concentrated in the IT sector, with eight percent in engineering and another eight percent in the biotech sector, 12% are in other sectors. PM services includes access to a technology help desk, researchers and experts are in other sectors. In the biotech sector, 12% are in other sectors. In the services includes access to a technology help desk, researchers and experts are in other sectors. In the services includes access to a technology help desk, researchers and experts are in other sectors. In the services includes access to a technology help desk, researchers and experts are in other sectors. In the services includes access to a technology help desk, researchers and experts are in other sectors. In the services includes access to a technology help desk, researchers and shared facilities and access to machinery, labs and packaging facilities. The incubator also offers co-incubation programme where incubatees can also set up and get help from a US or Asian incubator – through the links the TPM has with various incubator associations. About 80 and 2010 a total of 481 businesses graduated from the science park – with 28 going on to list on the country's stock exchange, Bursa Malaysia. The incubator's average incubatee is mostly male, above 20 years old and an ex-employee – usually from the IT sector. There is a mix of both first-time and seasoned entrepreneurs. About 80% of tenants are Indian and Chinese and non-Malays. Malays are concentrated mainly in the engineering firms that are tenants in the incubator.

<sup>&</sup>lt;sup>240</sup> Through its Advanced Materials Research Centre (Amrec) in Kulim, Kedah (Sirim corporate profile booklet).

<sup>&</sup>lt;sup>241</sup> Interview with 'Azra'iShu'ib of TPM.

<sup>&</sup>lt;sup>242</sup> Through links TPM has with six universities (Interview with Azrai bin Shuib).

NBIA, AABI, the Association of University Research Parks (AURP) and the International Association of Science Parks (IASP) (Interview with Azrai bin Shuib).

<sup>&</sup>lt;sup>244</sup> Interview with Azrai bin Shuib.

<sup>&</sup>lt;sup>245</sup> Ibid.

## 10.2.3 Mara (Kuala Lumpur)

Majlis Amanah Rakyat (Mara) or the Council of Trust for the Bumiputera, runs a number of incubators <sup>246</sup> – a furniture incubator (the Furniture Industry Technology Center or Fitec, located in Kuala Lumpur), a manufacturing technology incubator and production and pioneering facilities for new business sectors. Mara is still recruiting incubatees for its manufacturing technology incubator, which has space for 20 or more businesses, a laboratory and a packaging house. Fitec supports 257 furniture manufacturers <sup>247</sup> across the country, from its centre and showroom. The facility has 18 incubator spaces and entrepreneurs can stay for 10 to 15 years in the incubator. Business owners must visit its facilities to take advantage of short courses. There are hostel facilities for business owners to stay over at, while completing the week-long or three-day courses. The centre also has a permanent showroom at Malacca. Mara's Intep Financing Package offers soft loans of between RM500 000 (R1.3m) and RM5m (R13m) and includes business exposure training, factory space facility, financing for basic equipment and machinery, financing for management & support services, consultancy services as well as marketing and help with product development. Entrepreneurs must pay back the loan within five to 10 years. <sup>249</sup>

<sup>&</sup>lt;sup>246</sup> Most of Mara's incubators fall under its entrepreneur development division.

About 60% of sales from these manufacturers are to produce office and school furniture for government contracts. Some of the manufacturers have produced for Ikea and other furniture retailers (Interview with MohdKarmal bin Ismail).

<sup>&</sup>lt;sup>248</sup> Interview with MohdKarmal bin Ismail, deputy director of industrial and business development division, Mara, February 3, 2012, Kuala Lumpur.

<sup>&</sup>lt;sup>249</sup> From Mara webpage: http://www.mara.gov.my/web/guest/intep