SME COMMITTEE

RECOMMENDATIONS FOR BUDGET 2017

Singapore Business Federation
December 2016
## CONTENTS

PREAMBLE .......................................................................................................................... 1

1. INTRODUCTION ............................................................................................................... 3

   SMEs and SME Committee ............................................................................................... 3

   SMEC Budget Recommendations ................................................................................. 4

2. BUDGET CONSIDERATIONS ......................................................................................... 5

   Economic Outlook ............................................................................................................. 5

   Global Economy ................................................................................................................ 5

   Domestic Economy .......................................................................................................... 6

   Support for SME Growth and Development ................................................................. 9

   Third Growth Engine: Globally Competitive Companies ........................................... 9

   Broad-based Support for SMEs ..................................................................................... 12

   Budget Recommendations 2017 .................................................................................... 14

3. STRATEGIC RECOMMENDATIONS FOR BUDGET 2017: THIRD GROWTH ENGINE ..... 15

   Third Growth Engine: Globally Competitive Companies ........................................... 15

   Economic KPIs of Developing High Growth Companies .............................................. 16

   Private Bourse for Innovative Companies .................................................................... 17

   Asset Protection for Business Continuity ...................................................................... 20

   Entrepreneurial Talent .................................................................................................... 22

   IP Financing ..................................................................................................................... 24

   Commercialisation of Public Sector IP ......................................................................... 25

4. BROAD-BASED: SUPPORT FOR SMES ..................................................................... 27

   Cost of Doing Business ................................................................................................. 27

   Financing and Working Capital Challenges ................................................................... 35

   Innovation ......................................................................................................................... 37

   Internationalisation ......................................................................................................... 41

   Manpower and Productivity .......................................................................................... 47

5 CONCLUSION .................................................................................................................... 50
ANNEX ..................................................................................................................53
SME Committee .....................................................................................................53
Abbreviations ........................................................................................................58
References ..............................................................................................................61
PREAMBLE

During the early post-independence years (1965-1984), Singapore’s economy was driven by export-led industrialisation through multinational corporations (MNCs) as vehicles to achieve industrial growth. The past 30 years saw the rise of government-linked companies (GLCs), like DBS, Singtel and Singapore Technologies, when the government liberalised sectors such as finance, telecommunications and utilities, while SMEs continue to play a generally supporting role to MNCs¹.

The dual engines of MNC and GLC-led growth had guided Singapore’s economic development and supported the economy through economic crises like the 1985 recession, 1997 Asian Financial Crisis, Dotcom bubble in 2001 and the Global Financial Crisis in 2008. In the past 50 years, Singapore’s economic growth averaged 7.5 percent per year, placing Singapore among the world’s leading economies in terms of gross domestic product (GDP) per capita. In 2015, GDP per capita was about US$56,000 - comparable with Germany and the United States².

Singapore is restructuring and transforming its economy amid tepid global growth with uncertainties heightened by anaemic global growth and risk of nationalistic policies that could further fuel anti-trade sentiments which stifles growth. Singapore’s economic growth had slowed; GDP growth for 2016 is forecasted to come in at the lower end of 1 to 2 percent, and will only be slightly higher in 2017. Moving forward, in an era where growth would increasingly be driven by innovation and technology transformation, the Small and Medium-sized Enterprises Committee (SMEC) believes that it is imperative that Singapore develops a third growth engine (driven by technology, innovation and entrepreneurial talent) that can deliver future economic success.

For Budget 2017, the SMEC urges the government to take into consideration the importance of (1) creating a third growth engine, and (2) continue to provide broad-based

---

¹ State-owned enterprises in Singapore - historical insights into a potential model for reform, Tan CH et al, National University of Singapore, 2015
² “An economic history of Singapore: 1965 - 2065” - Keynote address by Ravi Menon, Monetary Authority of Singapore, 2015
support small and medium sized enterprises (SMEs) during the current period of economic restructuring and protracted slow growth.

**Third growth engine: globally competitive companies**

Growth in the technology revolution space would be led by entrepreneurs and disruptive innovation. Risk and uncertainties are innate to such innovation activities\(^3\). The SMEC’s six recommendations to support the development of the third growth engine aim to provide an environment conducive for a creative and entrepreneurial nation, and attract foreign entrepreneurial talents and high technology enterprises to form joint ventures with local enterprises in Singapore to create new businesses which would blaze new paths to success for Singapore.

**Provide broad-based support to SMEs**

While the local economy had remained resilient amid slow growth, concerns ranging from cost of doing business to manpower continue to be formidable headwinds SMEs face in their economic restructuring journey. Given the significance of SMEs to the Singapore economy, it is therefore very important for the government to ensure its strong support to SMEs especially during the current economic slowdown. It is an opportune time for the government to review and enhance the assistance programmes available to help them alleviate operating concerns and seize growth opportunities. This would be addressed by SMEC’s 15 recommendations targeted at broad-based support for SMEs.

---

\(^3\) Innovation and Economic Growth, Nathan Rosenberg, Stanford University, 2004
1. INTRODUCTION

SMEs and SME Committee

1.1 SMEs are defined as enterprises with annual sales turnover of not more than S$100 million or employment size of not more than 200 workers. SMEs are a significant pillar of Singapore’s economy, making up 99 percent of all businesses, employing nearly seven out of ten workers and contributing close to half of Singapore’s national GDP. A strong and growing SME community is essential to building a resilient and competitive Singapore economy.

<table>
<thead>
<tr>
<th>Enterprise Statistics (2015)</th>
<th>SMEs</th>
<th>Non-SMEs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Count: 190,100</td>
<td>99%</td>
<td>1%</td>
</tr>
<tr>
<td>Employment Count: 3.4 million</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>Nominal Value-Added (GDP): S$362 billion</td>
<td>48%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Source: Department of Statistics, Singapore

1.2 The SMEC was formed in December 2011 to serve as a platform for SMEs to speak up on contemporary business issues. The Singapore Business Federation (SBF) led SMEC provides a channel for the SME community and policymakers to discuss, research and analyse SME business issues to effect business-friendly policies in Singapore. SMEC members comprise business leaders representing a broad spectrum of industry sectors and businesses. Since its inception, SMEC has actively engaged in outreach and advocacy activities, continually giving feedback to government on SME issues and challenges, particularly on how SMEs are coping with economic restructuring, and the types of support SMEs would need to seize growth opportunities.

---

4 Singapore Economy, Department of Statistics (Singapore), 2016
* Non-SMEs are defined as enterprises with more than 200 employees or more than S$100 million annual turnover
1.3 Over the past five years, the SMEC had submitted Budget recommendations to the government, which focused on key issues and concerns that SMEs faced during the respective years.

1.4 In 2015 at the half-way mark of the Economic Strategies Committee restructuring journey, the SMEC called for the government to adopt a more holistic approach towards SME development, with targeted measures to support SMEs that were still grappling with transformation challenges, and to help SMEs grow through internationalisation, innovation and collaboration.

1.5 In 2016, the world economy entered a volatile period triggered by falling oil and commodity prices, slowing of large emerging markets, notably China, and tepid recovery in developed economies. Domestically, Singapore entered a new phase in her development with challenges that include a rapidly ageing and shrinking workforce, close to zero productivity growth, and intensified competition from emerging economies with new capabilities. The SMEC asked the government to assist SMEs with immediate growth challenges and look into the appointment of a dedicated SME authority empowered to drive SME development across whole-of-government.

1.6 In 2017, the SMEC will continue to champion issues pertinent to SME sustainability and development, as well as the economic competitiveness of Singapore. The insights gathered from SMEC’s work in 2016 formed the framework of SMEC’s Budget Recommendations 2017, which will be further elaborated in the subsequent sections of this report.
2. BUDGET CONSIDERATIONS

Economic Outlook

Global Economy

2.1 Forecasts from the World Bank, International Monetary Fund (IMF) and Organization for Economic Co-operation and Development\(^5\) (OECD) projected modest global growth in 2017. Growth is expected to rebound from an average of 2.8 percent in 2016 to 3.2 percent in 2017. In particular, the OECD predicted that the planned fiscal stimulus in the U.S. could catalyse private economic activities and provide a boost to major economies\(^6\).

<table>
<thead>
<tr>
<th></th>
<th>2016f</th>
<th>2017f</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Bank</td>
<td>2.4%</td>
<td>2.8%</td>
</tr>
<tr>
<td>OECD</td>
<td>2.9%</td>
<td>3.3%</td>
</tr>
<tr>
<td>IMF</td>
<td>3.1%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Average</td>
<td>2.8%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

*Source: World Bank, OECD, IMF*

2.2 Similarly, the IMF noted in their report on world economic outlook that “recovery is projected to pick up in 2017 as the outlook for emerging market and developing economies and the U.S. economy regains some momentum.” Global recovery is expected to accelerate slightly in 2017 as conditions in stressed economies gradually normalise.

2.3 However, key risks such as rising private sector debt in large emerging markets, heightened policy and geopolitical uncertainties\(^7\), anaemic global growth, nationalistic policies and anti-trade sentiments could stifle growth\(^8\). As the world

---

\(^5\) Economic Outlook No.100, Organization for Economic Co-operation and Development, 2016
\(^7\) Global Economic Prospectus, World Bank Group, 2016
\(^8\) World Economic Outlook, International Monetary Fund, 2016
economy moves further away from the global financial crisis, the factors affecting global economic performance are becoming more complex, reflecting a combination of global forces such as demographic trends, disruptive technologies, persistent decline in productivity growth, and an adjustment to lower commodity prices.

2.4 The Ministry of Trade and Industry (MTI) noted similar trends and highlighted three downside risks$^9$ that could derail growth in the global economy – (1) uncertainty arising from Brexit, (2) risk of debt defaults amidst rising corporate credit levels in China, and (3) heightened global political risk and uncertainties. In particular, a retreat in globalisation which could weaken the lukewarm global economic growth.

2.5 Moreover, the gradual improvements in global growth may not directly translate to increased external demand for Singapore as the elasticity of trade to global growth is likely to remain subdued due to factors such as the slowdown in investment growth in economies like the US and China, as well as insourcing trends in China$^{10}$.

**Domestic Economy**

2.6 The Monetary Authority of Singapore (MAS) opined in their Macroeconomic Review$^{11}$ published in October 2016 that Singapore’s GDP growth is not expected to pick up significantly in the near term, due to protracted weak growth in global trade which impacts highly trade dependent economies like Singapore. The MAS noted that the Singapore economy’s exposure to underperforming sectors such as semiconductors and transport services further contributed to the drag on growth.

2.7 GDP - The MTI’s Economic Survey of Singapore for Third Quarter 2016 reported that real GDP grew by 1.1 percent in 3Q16, while GDP for 2016 is forecasted to

---


come in at the lower end of the 1 to 2 percent range, and only slightly higher in 2017. Manufacturing, Other Service Industries and Information & Communications contributed to about 50 percent of overall GDP growth, and were the main contributors to GDP growth while Finance & Insurance and Wholesale & Retail Trade contracted.

2.8 Marine and Offshore Engineering (M&OE) Sector - The M&OE sector is going through turbulent times arising from persistently low oil prices, low demand for services amid a large built-up capacity and heightened anxiety arising from large corporates defaulting\(^\text{12}\) on their bonds. Feedback from the business community revealed that M&OE companies had experienced project cancellations, delayed deliveries of major projects and cutbacks on expenditures, and had laid off staff. The sector is currently in a stage of rightsizing to a new equilibrium of lower demand and prices. To support and retain capabilities in this sector, the MTI enhanced IE Singapore’s Internationalisation Financing Scheme and reintroduced SPRING Singapore’s Bridging Loan scheme in November 2016\(^\text{13}\).

2.9 Labour and Productivity – In MTI’s Economic Survey of Singapore (ESS) – Third Quarter 2016, it was reported that although unemployment rate had remained low, it could increase arising from ongoing industry restructuring. Redundancies are expected to rise in sectors facing weak external demand such as Manufacturing. On the other hand, domestically-oriented services such as Community, Social & Personal Services and Food & Beverage Services will continue to hire even as they restructure. Overall labour productivity, as measured by value-added per worker, grew by 0.1 percent in the third quarter compared to the same period a year ago.


2.10 SME Sentiments – Increasing pessimism clouds the outlook for 2017. The overall SBF-DP SME Index reading for 1Q17 to 2Q17 recorded its lowest reading of 49.8\textsuperscript{14} in seven years, highlighting business uncertainty as SMEs’ top-line performance weakens. Findings from the SBF’s National Business Survey (NBS) 2016-2017 echoed similar trends, with only one in ten businesses expecting the economic climate to get better over the next 12 months whilst almost half felt that it could get worse. SMEs would need to seek out strategies to better manage costs to tide through the economic

\textsuperscript{14} SBF DP SME Index 1Q17-2Q17, DP Info Group, 2016
fluctuations and focus on overseas expansion as the domestic market becomes increasingly saturated.

**Sentiments on the Singapore Economy**

![Bar chart showing sentiments on the Singapore Economy](chart image)

- **Better**
  - Last 12 Months: 3%
  - Next 12 Months: 11%
- **Neutral**
  - Last 12 Months: 11%
  - Next 12 Months: 41%
- **Worse**
  - Last 12 Months: 63%
  - Next 12 Months: 48%

*Source: National Business Survey 2016-2017*

**Support for SME Growth and Development**

**Third Growth Engine: Globally Competitive Companies**

2.12 Growth Engines: Economic growth during Singapore’s early post-independence years was driven by an export-led industrialisation through multi-national companies (MNCs) who set up operations in Singapore. The importance of developing local SMEs and having a vibrant local sector as an economic strategy was first emphasised in the Report of the Economic Committee\(^{15}\) – The Singapore Economy: New Directions in 1986. It was recognised then, that SMEs complement the MNC strategy as MNCs need capable and reliable supporting industries to function effectively. Additionally, local companies can be depended on to support the economy during a downturn when MNCs cut back on production due to lowered

\(^{15}\) Report of the Economic Committee – The Singapore Economy: New Directions, MTI, 1986
demand. Singapore’s second growth engine emerged in mid 1980s when the government liberalised sectors such as finance, telecommunications and utilities, leading to the rise of GLCs like DBS, Singtel, Singapore Technologies and SIA.

2.13 The dual strategies of MNC and GLC-led growth had guided Singapore’s economic development and supported the economy through economic crises like the 1985 recession, 1997 Asian Financial Crisis, Dotcom bubble in 2001 and the Global Financial Crisis in 2008. In the past 50 years, Singapore’s economic growth averaged 7.5 percent per year, placing Singapore among the world's leading economies in terms of gross domestic product (GDP) per capita. In 2015, GDP per capita was about US$56,000 - comparable with Germany and the United States.

2.14 Singapore is currently in a mode of economic restructuring and transformation amid tepid global growth. In the past five years, economic growth had slowed and competition with regional economies had intensified. In 2010, Singapore’s GDP growth was ranked first among Singapore, China, India, Malaysia and Thailand; in 2016, Singapore was ranked fifth.

Source: MAS website
2.15 A key strategy in the 2010 Report of the Economic Strategies Committee (ESC) was to grow a deeper base of globally competitive Singapore enterprises, consisting of 1,000 local enterprises with annual revenues over S$100 million, to develop and strengthen the external wing of the economy\textsuperscript{16}. However, today there remains a scarcity of local enterprises that can be considered to be global brands or companies. In the latest Forbes Global 2000 (2016) compilation of the largest global public listed companies, there are only 17 Singapore-based companies, and none of which are newly emerged companies.

2.16 The SMEC is of the view that it is critical that Singapore-based enterprises are represented among the share of high performing corporates to ensure Singapore’s sustained competitiveness and relevance in the new economy. This is especially so with competition intensifying in the region. Enterprises in the emerging and developing economies are growing rapidly. The Boston Consulting Group (BCG) reported\textsuperscript{17} that dynamic companies are sprouting regionally in Philippines, Malaysia, Indonesia, China and India.

2.17 In an era where growth would increasingly be driven by innovation and technology transformation, the SMEC believes that it is imperative that Singapore develops a third growth engine that is driven by technology, innovation and entrepreneurial talent. More needs to be done to groom Singapore enterprises into globally competitive companies, and also to attract foreign entrepreneurial talents and high technology enterprises to form joint ventures with local enterprises in Singapore to create new businesses which would blaze new paths to success for Singapore.

\textsuperscript{16} Report of the Economic Strategies Committee, MTI, 2010
\textsuperscript{17} 2016 BCG Global Challengers, The Boston Consulting Group, 2016
**Broad-based Support for SMEs**

2.18 SMEs are an important pillar of the Singapore economy. In the past 20 years, SMEs have continued to play an increasingly significant role in the Singapore economy. From 1997 to 2015, the number of SMEs had almost doubled, and workers employed by SMEs nearly tripled\(^{18}\).

<table>
<thead>
<tr>
<th>SME Statistics</th>
<th>1997</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Count</td>
<td>98,000</td>
<td>188,000</td>
</tr>
<tr>
<td>Employment</td>
<td>800,000</td>
<td>2,200,000</td>
</tr>
</tbody>
</table>

*Source: DOS and SMU*

2.19 Amid muted global demand and the high cost of doing business in Singapore, many SMEs reported margin compression, and more are projecting negative turnover growth for their performance in 2016.

<table>
<thead>
<tr>
<th>Turnover growth</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Above 10% per year</td>
<td>12%</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Up to 10% per year</td>
<td>39%</td>
<td>37%</td>
<td>37%</td>
</tr>
<tr>
<td>Zero turnover growth</td>
<td>40%</td>
<td>47%</td>
<td>41%</td>
</tr>
<tr>
<td>Negative turnover growth</td>
<td>7%</td>
<td>5%</td>
<td>10%</td>
</tr>
</tbody>
</table>

*Source: DP SME Development Survey 2016*

2.20 90 percent of SMEs surveyed expressed difficulty in managing cost, particularly manpower cost. This finding corroborated with results from SBF’s NBS 2016-2017 which showed that close to seven out of ten businesses find labour and manpower issues as key business challenges.

\(^{18}\) Data from DOS and Research Collection, Lee Kong Chian School of Business
2.21 Moving beyond cost, findings from the SME Development Survey 2016 indicated that hiring challenges (29 percent), uncertainty in the global economic environment (28 percent) and increasing domestic competition (21 percent) are the other top business concerns of SMEs in Singapore.

2.22 SMEs are focusing their efforts on improving customer service, raising productivity or streamlining business processes and increasing their marketing and promotional efforts to cope with these business concerns. NBS 2016-2017 found that businesses would welcome support in short term measures from the government to help them weather through choppy economic conditions.
2.23 To lift the growth prospects of SMEs and navigate through the current economic slowdown, broad-based support should be accorded to SMEs to alleviate operating concerns and to seize growth opportunities.

**Budget Recommendations 2017**

2.24 SMEC’s recommendations for Budget 2017 took into consideration the benefits of Singapore owned world class companies would value-add to the local economy and uplift the business ecosystem, and the increasingly significant role of SMEs in Singapore. In view of these, the SMEC recommends (1) a third economic growth engine, and (2) providing broad-based support to SMEs, during the current protracted period of low growth.
3. STRATEGIC RECOMMENDATIONS FOR BUDGET 2017: THIRD GROWTH ENGINE

*Third Growth Engine: Globally Competitive Companies*

3.1 As highlighted in Chapter Two – Budget Considerations, it is critical that Singapore develops a third growth engine through globally competitive companies. It is therefore important that (1) promising local high growth enterprises are able to germinate and develop into globally competitive companies, and that (2) Singapore continues to be an attractive place, especially for entrepreneurial talents and enterprises with disruptive technology and innovation to anchor their operations.

3.2 SMEC’s recommendations in developing globally competitive companies aim to provide an environment conducive for a creative and entrepreneurial nation, and attract foreign entrepreneurial talents and technology enterprises to form joint ventures with local enterprises in Singapore to create new businesses which would blaze new paths to success for Singapore. The six recommendations under this strategy are:

a) Economic key performance indicators (KPIs) of developing high growth companies;
b) Private bourse for innovative companies;
c) Asset protection for business continuity;
d) Talent attraction;
e) Intellectual property financing;
f) Commercialisation of public sector intellectual property.
3.3 In Budget 2016, the government announced the Industry Transformation Programme (ITP) for 23 industry sectors in Singapore. The ITP is an industry-centric strategy aimed at sustaining the growth and competitiveness of Singapore’s economy and industries. Under the ITP, each industry sector will get an Industry Transformation Map (ITM) tailored to the needs of their specific industry to help drive productivity and innovation, skills development and promote internationalisation. Designated government agencies will be assigned to each ITM; for example, under the manufacturing cluster, the Economic Development Board (EDB) would be responsible for industries ranging from energy and chemicals to aerospace.

3.4 The SMEC welcomes the tighter coordination and accountability within the government brought about by the ITMs, which will be effectively operationalised by the designated lead government agencies to oversee the development of targeted industries. With an integrated approach involving skills development, innovation, productivity and strong partnerships, the SMEC believes that the ITMs could provide an impetus in aiding the emergence of globally competitive companies in Singapore. Agencies-in-charge of their respective ITMs would be well-placed to develop high growth local companies into globally competitive companies in the industry sector under their charge.
3.5 Singapore’s current pool of technology companies is limited. The SMEC opine that there is a need to attract foreign technology enterprises to Singapore while developing indigenous companies in order for the technology and innovation-based business ecosystem to reach a critical mass. As innovation-based enterprises and entrepreneurs are globalised and mobile in nature, it is important for Singapore to have in place attractive schemes and initiatives to entice them to anchor their headquarters or operations in Singapore. In order for the local business community to benefit and retain the technology and innovation brought about by these companies, it is also therefore pertinent that such companies enter into joint ventures with local companies to qualify them for the incentive programmes.

Recommendation

a) Agencies-in-charge of their respective Industry Transformation Maps to be assigned a target on the number of GCCs to be developed.
b) Introduce incentive schemes to attract innovative companies to anchor in Singapore, with the condition that they enter into a joint venture with local companies.

Private Bourse for Innovative Companies

3.6 At present, enterprises in Singapore could raise capital through debt financing, angel funds, venture capital, private equity and the Singapore Stock Exchange (SGX). However, the business community provided feedback that it remains difficult for technology companies to raise capital.

* The joint venture should have a minimum 30% local shareholding
3.7 The “New Third Board (新三板)” (also known as National Equities and Quotation, NEEQ) established in China in 2006 is an Over-The-Counter (OTC) exchange that provides greater depth of financing options for Chinese SMEs. The New Third Board, regulated by the China Securities Regulatory Commission (CSRC), avails a platform for innovative companies in China to seek capital to fund their growth and development. Investors in this market have to demonstrate sound financial competencies and be accredited, qualified investors. They are required to meet the CSRC’s requirements (e.g. qualified foreign institutional investors, renminbi qualified foreign institutional investors and individual investors with investible assets worth at least RMB $5 million) before they are allowed to participate. As of June 2016, there are approximately 7,400 companies listed on the New Third Board with a total market capitalisation of RMB $2.9 trillion (approximately S$616 billion).

3.8 Business leaders observed a trend of companies choosing to list their businesses in public exchanges such as the Australian Stock Exchange and in private exchanges like the “New Third Board”. Further, the recent wave of privatisations in the SGX which saw the delisting of companies such as SMRT, OSIM, NOL and Tiger Airways puts the market at the risk of a negative cycle where investors lose interest in the exchange which in turn leads to lower liquidity.

3.9 In SBF’s Position Paper for a Vibrant Singapore, business leaders opined that Singapore should explore supplementing our public securities exchanges with private securities exchanges similar to those that exist in Taiwan and the US because these can provide more platforms for enterprises and entrepreneurs to raise capital and allow investors with different risk appetites to participate. These can also provide more platforms for enterprises to raise risk capital for innovation.

---

3.10 Similar ideas were again discussed more recently in a Straits Times report “Feasibility of private bourse being explored” dated 20th December 2016\textsuperscript{23}. It was commented that Singapore could benefit from having a secondary, private exchange to allow accredited investors to buy shares of non-listed companies. The private bourse would give SMEs a venue to raise capital without the constraints of being listed, while investors will have access to a wider selection of companies. Industry players opined that the upside of setting up a successful private exchange would potentially allow Singapore to become a global beacon that attracts good companies and talent to Singapore. However, a right balance of free market forces and regulatory involvement is required to achieve this.

3.11 Feedback from entrepreneurs indicated that innovative companies need a visible platform to showcase their capabilities, while investors welcome increased liquidity for their investments in non-publicly traded companies. Currently, there is an absence of a robust private platform to increase the visibility of viable innovative companies to institutional funds and accredited investors that facilitates capital raising and enhance liquidity for investors. A study could be commissioned to assess the feasibility of establishing a private bourse for innovative companies to raise capital for growth and development.

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The government to commission a study to assess the feasibility of establishing a private bourse for innovative companies to raise capital.</td>
</tr>
</tbody>
</table>

Asset Protection for Business Continuity

3.12 Enterprises venturing into disruptive technologies are often high-risk with potentially high failure rates. Statistics\textsuperscript{24} show that among US start-ups, those in the information sector had the least survival rates as compared to traditional sectors like finance, healthcare and agriculture.

![Startup Survival Rate](image)

Source: SBRI

3.13 However, it should be recognised that risk is also the primary advantage\textsuperscript{25} entrepreneurs have over market competition in their pursuit of ideas that could potentially disrupt the existing market place. The SMEC opine that the local business environment could introduce new elements that encourage entrepreneurs to explore, develop, harness and bring to market disruptive or innovation products and services.

\textsuperscript{24} Startup Business Failure Rate by Industry, Statistics Brain Research Institute, 2016, \url{http://www.statisticbrain.com/startup-failure-by-industry/}

\textsuperscript{25} All Partovi Tells Startups to Maximise Risk, Ronald P.B., Tech.Co, 2013, \url{http://tech.co/all-partovi-maximize-risk-2013-06}
3.14 The assignment for the benefit of creditors (ABC) framework available in some US states is a business liquidation facility available in some US states is a business liquidation facility available to an insolvent debtor as an alternative to bankruptcy proceedings, and facilitates:

- The transfer of the assets, which may include intellectual property, know-how and inventions, of the troubled business to an acquiring entity free of the unsecured debt incurred by the transferor and;
- The winding down of the company in a manner designed to minimise negative publicity and potential liability for directors and management.

3.15 In the event that companies (in particular, companies with potentially disruptive intellectual property) may be at risk of being unable to continue operating as a going concern, it is important that options are available for entrepreneurs and investors to protect their businesses’ key assets, particularly intellectual property, during the liquidation process, so that the entrepreneurs and investors can continue to refine and develop their respective business ideas after initial unsuccessful attempts. This is an essential safeguard if we are to promote the spirit of entrepreneurship in Singapore.

**Recommendation**

The government to study the feasibility of implementing a framework to enable entrepreneurs and investors, particularly those in high-technology industries, to protect important assets and investors’ interests so that distressed businesses can find solutions to alleviate their situation.

---

Attract Entrepreneurial Talent

“If Singapore depends on the talent it can produce out of three million people, it's not going to punch above its weight.”

Mr Lee Kuan Yew, at the South Asian Diaspora, 22 July 2011

3.16 Singapore had been consistently ranked among the world’s economies for talent attraction and infrastructure, taking second place in both INSEAD’s Global Talent Competitiveness Index 2016 and Statista’s ranking of countries with the best infrastructure 2016.

3.17 In the Global Innovation Index 2016, Singapore ranked first in terms of innovation inputs but 20th in terms of innovation output. To derive higher innovation outputs, Singapore requires entrepreneurial talents who are able to catalyse and lead the enablement and growth of globally competitive companies by introducing or conceptualising and commercialising innovative and disruptive products and services.

3.18 According to the Ministry of Manpower’s “A Guide to Singapore’s Work Passes”, there are three types of work passes for foreign professionals in Singapore – (1) employment pass, (2) personalised employment pass and (3) Entrepass.

---

28 The Global Talent Competitiveness Index 2015-16, INSEAD, 2015
30 Global Innovation Index 2016, Cornell University, INSEAD and WIPO, 2016
<table>
<thead>
<tr>
<th>Type</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Pass (EP)</td>
<td>• Have a job offer in Singapore.</td>
</tr>
<tr>
<td></td>
<td>• Work in a managerial, executive or specialised job.</td>
</tr>
<tr>
<td></td>
<td>• Earn a fixed monthly salary of at least $3,300</td>
</tr>
<tr>
<td></td>
<td>• Have acceptable qualifications, usually a good university degree, professional qualifications or specialist skills.</td>
</tr>
<tr>
<td>Personalised Employment Pass (PEP)</td>
<td>• Last drawn fixed monthly salary overseas was at least $18,000.</td>
</tr>
<tr>
<td></td>
<td>• An Employment Pass holder earning a fixed monthly salary of at least $12,000.</td>
</tr>
<tr>
<td>Not eligible</td>
<td>• A freelancer or foreigner who intends to work on a freelance-basis.</td>
</tr>
<tr>
<td></td>
<td>• A sole proprietor, partner or director and shareholder in an ACRA-registered company.</td>
</tr>
<tr>
<td>EntrePass</td>
<td>• Have (or intend to start) a private limited company registered with ACRA.</td>
</tr>
<tr>
<td></td>
<td>• At least $50,000 in paid-up-capital.</td>
</tr>
<tr>
<td></td>
<td>• Hold at least 30% of the shares in the company.</td>
</tr>
<tr>
<td></td>
<td>And fulfil at least one of the following which will be assessed on merits</td>
</tr>
<tr>
<td></td>
<td>• Has funding from a government-accredited venture capitalist or business angel</td>
</tr>
<tr>
<td></td>
<td>• Holds intellectual property</td>
</tr>
<tr>
<td></td>
<td>• Has research collaboration with A*STAR or a university</td>
</tr>
<tr>
<td></td>
<td>• Is an incubate at a government-supported incubator</td>
</tr>
</tbody>
</table>

Source: MOM Website

3.19 The SMEC is cognizant that many entrepreneurial talents come from diverse backgrounds, and may not necessarily meet the current criteria required (e.g. academic qualifications, professional certificates) to qualify for the required work passes to base themselves in Singapore. The requirements for Entrepass could be refined, such that it becomes more attractive for high technology entrepreneurs to relocate and base their operations in Singapore, with the condition that they enter into a joint venture with local enterprises, qualified by the Singapore government.
**Recommendation**

a) The government to review and refine the criteria for EP and PEP to take into account the unique profiles which characterises entrepreneurial talents.

b) Review the work pass requirements to allow entrepreneurs with innovative and/or disruptive technologies to be granted an Entrepass, on the condition they enter into a joint venture with qualified local enterprises.

**IP Financing**

3.20 Leveraging on intellectual property for growth is expected to become increasingly important to SMEs in a globalised knowledge-based economy. Empirical research conducted by the OECD showed that SMEs who are able to leverage on knowledge assets and exploit their increasing returns could disproportionately contribute to growth. The report also noted that such SMEs are subject to high risks of failure. Furthermore, imperfections in the capital markets can lead to less-than-optimal investments in knowledge-based assets.\(^{32}\)

3.21 IPOS has a S$100 million IP Financing Scheme (IPFS)\(^{33}\) to help IP-rich companies monetize their IP for business growth and expansion. Under the IPFS enhanced in June 2016, companies incorporated in Singapore can access loan facilities not only using their granted patents, but also granted trademarks and copyright related rights as loan collaterals. The Singapore government partially underwrites (50 percent) of the loans issued by participating financial institutions (PFI).

3.22 Apart from acquiring IP through R & D, SMEs could also acquire IP through other means. The SMEC believes that the IPFS could be enhanced by (1) expanding its

---

32 Enquiries into Intellectual Property's Economic Impact, OECD, 2015
scope to include IP acquisition financing and (2) a higher quantum of risk co-sharing by the government to spur PFI lending under the IPFS.

**Recommendation**

a) Expand the IPFS to include IP acquisition financing.

b) The government to co-share a higher risk quantum (currently at 50 percent) for loans under the IPFS.

### Commercialisation of Public Sector IP

3.23 Singapore has numerous public research institutes (PRI) and institutes of higher learning (IHL). According to IPOS’s annual report for 2015/2016, PRIs and IHLs are the top filers of patents in Singapore.

<table>
<thead>
<tr>
<th>ASTAR R&amp;D Survey 2014</th>
<th>Public RIs/Higher Education Average</th>
<th>Public RIs Higher Education Average</th>
<th>Private Sector Average</th>
<th>Local SMEs</th>
<th>LIEs</th>
<th>Foreign Coys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent Awarded per Million Dollars of R&amp;D Expenditure</td>
<td>0.084</td>
<td>0.108</td>
<td>0.066</td>
<td>0.136</td>
<td>0.220</td>
<td>0.197</td>
</tr>
<tr>
<td>R&amp;D Related Revenue per Dollar of R&amp;D Expenditure</td>
<td>0.015</td>
<td>0.033</td>
<td>0.001</td>
<td>4.922</td>
<td>1.069</td>
<td>3.320</td>
</tr>
<tr>
<td>Patent Awarded per Researcher</td>
<td>0.015</td>
<td>0.027</td>
<td>0.010</td>
<td>0.039</td>
<td>0.048</td>
<td>0.056</td>
</tr>
<tr>
<td>R&amp;D Related Revenue (millions) per Researcher</td>
<td>0.003</td>
<td>0.008</td>
<td>0.0002</td>
<td>1.424</td>
<td>0.234</td>
<td>0.944</td>
</tr>
<tr>
<td>R&amp;D Related Revenue (millions) per Patent Owned</td>
<td>0.027</td>
<td>0.053</td>
<td>0.003</td>
<td>4.915</td>
<td>0.739</td>
<td>3.008</td>
</tr>
</tbody>
</table>

*Source: ASTAR*
3.24 Intellectual property are intangible assets with a limited shelf life whose value diminishes with time. Compiled data (above) from A*STAR’s National Survey of Research and Development (R&D) showing the comparative returns on investment in R&D among the public and private sectors suggest that IP in PRIs and IHLs might have been insufficiently commercialised. To address this issue, some business leaders proposed that the government could task an agency with the mandate of commercialising intellectual property developed by public sector research institutes and institutes of higher learning.

**Recommendation**

Government to formulate and implement policies to better commercialise the intellectual property developed by public sector research institutes and institutes of higher learning.
4. **BROAD-BASED: SUPPORT FOR SMES**

*Cost of Doing Business*

4.1 The slowdown in growth and weakened market demand has impacted the business sustainability of SMEs. Cost pressures have also led to thinning margins for more SMEs\(^34\).

4.2 Overall Unit Labour Cost in 3Q2016 rose by 3.9 percent, faster than the 3.7 percent increase in the second quarter which is driven by the increase in total labour costs per worker and weak labour productivity growth\(^35\).

4.3 Manpower and rental related costs remain the top cost concerns from businesses as demonstrated in the SME Development survey 2016. This section of SMEC’s broad-based recommendations focuses on helping enterprises to overcome cost challenges.

*Cost Components Companies Face Difficulty Coping With*

\(^34\) DP Info SME Development Survey 2016, DP Information Group, 2016

Reducing Manpower Related Cost

4.4 Manpower cost is identified as a key common challenge across industries. Seven in ten companies face difficulty in managing manpower costs. Among cost components, businesses had provided feedback that foreign worker levies constituted a significant proportion of business costs. This correlates with the 12 percentage point increase (as compared to 2015) in survey respondents\(^{36}\) who found government charges a cost concern, particularly for the construction sector.

<table>
<thead>
<tr>
<th>Cost Components Companies Face Difficulties with</th>
<th>Business Sector</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constr</td>
<td>Infocomm</td>
</tr>
<tr>
<td>Manpower</td>
<td>2016</td>
<td>83%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>89%</td>
</tr>
<tr>
<td>Materials</td>
<td>2016</td>
<td>49%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>50%</td>
</tr>
<tr>
<td>Rental</td>
<td>2016</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>23%</td>
</tr>
<tr>
<td>Financing</td>
<td>2016</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>5%</td>
</tr>
<tr>
<td>Currency Fluctuations</td>
<td>2016</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>4%</td>
</tr>
<tr>
<td>Government Charges</td>
<td>2016</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>15%</td>
</tr>
<tr>
<td>Technology</td>
<td>2016</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>3%</td>
</tr>
<tr>
<td>Advertising &amp; Marketing</td>
<td>2016</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>2%</td>
</tr>
<tr>
<td>Transport</td>
<td>2016</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>8%</td>
</tr>
<tr>
<td>Utilities</td>
<td>2016</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: DP SME Development Survey 2016

\(^{36}\) DP Info SME Development Survey 2016, DP Information Group, 2016
4.5 The foreign worker levy is a pricing mechanism to regulate the number of foreign workers in Singapore. Coupled with the slowdown in economic growth and lowered demand for goods and services, the growth in Singapore’s foreign workforce had abated.

![Foreign Workforce Numbers](source: MOM website)

<table>
<thead>
<tr>
<th>Pass Type</th>
<th>Dec 2015</th>
<th>June 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Pass (EP)</td>
<td>187,900</td>
<td>189,600</td>
</tr>
<tr>
<td>S Pass</td>
<td>178,600</td>
<td>179,400</td>
</tr>
<tr>
<td>Work Permit (Construction)</td>
<td>326,000</td>
<td>326,700</td>
</tr>
<tr>
<td>Work Permit (Less construction and Foreign Domestic Workers)</td>
<td>439,600</td>
<td>445,500</td>
</tr>
<tr>
<td>Other Work Passes</td>
<td>23,600</td>
<td>26,300</td>
</tr>
<tr>
<td><strong>Total Foreign Workforce</strong> (excluding Foreign Domestic Workers)</td>
<td>1,155,800</td>
<td>1,167,600</td>
</tr>
</tbody>
</table>

Numbers may not add up to total due to rounding.

Source: MOM website

---

According to MOM’s Work Permit Holders Levy Schedule, the levy rates for construction sector – basic tier R2 is schedule for a hike in July 2017, while the levies for other sectors had no scheduled increases at this juncture. With the growth in foreign workforce under control, the SMEC opine that any planned increase in Foreign Worker Levy should be held back to help businesses tide through the current period of protracted slow growth.

**Recommendation**

The government to hold back any planned increase in Foreign Worker Levy across all sectors for 36 months.
Government Compliance and Regulations

4.7 In 2015, the SMEC received feedback from businesses regarding escalating compliance and regulatory costs. While businesses on the whole understood the importance of instituting certain rules and regulations, the challenge in meeting the compliance requirements and costs are often onerous. For example, road closures for major events such as Pedestrian Night in Orchard Road not only involve significant costs, but also liaison with multiple government agencies such as the Singapore Tourism Board, Building and Construction Authority, Land Transport Authority, Singapore Land Authority, National Environment Agency, Urban Redevelopment Authority, Singapore Police Force and National Parks to obtain the necessary approvals.

4.8 In NBS 2016-2017\(^\text{38}\), dissatisfaction with current policies on compliance cost and issues ranked first, even above manpower issues. Firms express dissatisfaction with the high amount of compliance and regulatory costs. These include stamp duty, audit costs, GST, and a requirement to invest in new technology. These are seen as a burden on top of operational costs such as rental/labour cost, and COE. The high costs of business have caused Singapore to lose its competitive edge over other Asian countries.

Areas in which companies are dissatisfied with current policies

4.9 Businesses’ second top wish list for Budget 2017 according to the NBS 2016-2017 is the lowering of compliance cost, fees and taxes, which ranked just behind measures to assist with manpower issues. It is important for the Government to review whether its policies are restricting growth, especially for start-ups and SMEs.

4.10 Other than costs, some businesses also provided feedback that expeditious approvals by the regulatory bodies for the sectors under their respective purviews would enhance the ease of doing business in Singapore. Business owners commented that some agencies like the Urban Redevelopment Authority’s (URA) practices of having clear and defined service level agreements and timelines for the approval of regulatory related requirements had improved SMEs’ ease of doing business and reduced business costs as well.

National Business Survey 2016-2017: Budget Wish List

Source: National Business Survey 2016-2017
Recommendation
The government to study, review and streamline compliance, regulatory related costs, requirements and approving framework, starting with pilot sectors such as advanced manufacturing and food services.

Rental Relief amid Protracted Period of Slow Growth

4.11 Although rental prices have declined by 1.7 percent quarter on quarter in 3Q2016 across all JTC industrial properties\(^{39}\), weak market demand still weighs down on business operators. Additionally, companies who are committed to existing lease agreements may not immediately benefit from the lowered rental rates. The SMEC noted the government provided rental rebates on various government properties to help enterprises reduce business cost during the 1997 Asian Financial Crisis\(^{40}\).

Recommendation
Government landlords to provide rental rebates for all industrial, commercial and retail properties.

Fair, Unambiguous and Transparent Rental Practices

4.12 Tenancy agreements are legally binding documents, often containing many complex terms and conditions which can be challenging for the average business owner to fully comprehend. Coupled with the lack of accurate reference rental data for tenants to make an informed decision, SMEs are disadvantaged in their negotiation with landlords for fair tenancy agreements.

\(^{40}\) Economic Survey of Singapore, Ministry of Finance, 1998
4.13 The Fair Tenancy Framework (FTF) was designed to help achieve fairness in tenancy negotiations, by adopting a three pronged approach:

a) Rental Data Transparency
b) Education and Awareness
c) Preferred Dispute Resolution Channel

4.14 The FTF aims to help tenants and landlords understand the major terms and conditions of the lease agreement, their respective roles and responsibilities and the implications of prevalent industry lease clauses. It also serves as a checklist during negotiation.

4.15 With the recent consolidation of Jurong Town Corporation (JTC) and Housing Development Board (HDB) industrial properties, it is timely for government landlords to take the lead in endorsing and adopting fair tenancy practices. The pilot adoption by the two state landlords can lead the rest of the government-linked property operators as well as private property owners into adopting the framework.

**Recommendation**

Government landlords to take the lead in adopting the Fair Tenancy Framework.

**National Portal to Digitise Business-to-Business (B2B) Transactions**

4.16 E-commerce has transformed how business-to-consumer (B2C) enterprises operate. It has enabled cashless payments, which improves accounting accuracy, and online listing of product and services which allows companies to be accessible to a large base of consumers via search engines. Orders are now consolidated and can be processed once it reaches an optimal level. This increases the efficiency of order fulfilments and manpower usage.
4.17 GeBIZ is an established government procurement platform. It has successfully digitised whole-of-government tender and procurement needs and processes which not only improved efficiency significantly but raise its potential as a significant portal for B2B transactions.

4.18 Commercially operated B2B e-procurement platforms are available in the likes of SAP Ariba and SESAMI. A handful of large local enterprises are actively using the services provided by these platforms.

4.19 Building a similar portal to GeBIZ with added B2B specific features on a national level for B2B procurement which is managed by a commercially neutral party such as a TAC, could add vibrancy to the B2B market place by making procurement opportunities conveniently available to suppliers. It also provides businesses with increased visibility of new opportunities during times of low market demand. The platform can catalyse the digitisation and automation of other operational processes which will in turn substantially improve productivity.

**Recommendation**

The government to commission a study on the implementation of setting up a national B2B platform.

**Financing and Working Capital Challenges**

4.20 Challenges in accessing financing has seen an increase of 16 percentage points from 2015, according to the SME Development Survey 2016. As of July 2016, bank loans fell for a tenth consecutive month amid sluggish global economy and weak business activities.  

---

4.21 SMEs’ financial position are increasingly stretched during the current period of protracted slow demand, drying liquidity and delay in receipt of account receivables. This is reflected in findings from the SME Development Survey 2016, with more SMEs stating that they face higher interest rates (46 percent), suppliers tightening credit access (34 percent) and need more collaterals for the same financing (19 percent).

**Financing Challenges**

<table>
<thead>
<tr>
<th>Issue</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Interest Rates for Bank Loans</td>
<td>40%</td>
<td>43%</td>
</tr>
<tr>
<td>Suppliers Tightening Credit Access</td>
<td>34%</td>
<td>27%</td>
</tr>
<tr>
<td>Need More Collateral for Same Financing</td>
<td>19%</td>
<td>11%</td>
</tr>
<tr>
<td>Delayed Payment from Customers</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Unable to Renew Financing</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Cash Flow / Working Capital*</td>
<td>3%</td>
<td>6%</td>
</tr>
</tbody>
</table>

* Source: DP SME Development Survey 2016

4.22 On 25 November 2016, the government announced the enhancement of IE Singapore’s Internationalisation Finance Scheme (IFS) and the reintroduction of SPRING’s Bridging Loan (BL) Programme for the M&OE sector. The SBF noted that while it is uncommon for the government to offer support to a specific sector, the support measures are timely, particularly during a period when the sector is going through turbulent times arising from persistently low oil prices, low demand for services amid a large built-up capacity.
Working Capital Loan

4.23 As of end November 2016, SPRING’s Working Capital Loan (WCL) introduced in June 2016 had seen a strong take-up rate with over $500 million in loans made to over 3,000 SMEs under the scheme\textsuperscript{42}.

4.24 Corroborating the take-up rate of the WCL with the findings from the SME Development Survey 2016, the SMEC opine that the financing outlook for SMEs would remain challenging and SMEs would continue to have financing needs. Further, the issues affecting the marine and offshore engineering sector have broad industry impact. Suppliers servicing or indirectly related to the sector would be affected as well.

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance the existing Working Capital Loan by raising the loan cap beyond $300,000 and increase the risk quantum co-shared (currently at 50 percent) by the government.</td>
</tr>
</tbody>
</table>

Innovation

4.25 Innovation plays an imperative role in the development of our economy. In Budget 2016, the Industry Transformation Programme (ITP) was launched to strengthen enterprises and industry, and to drive growth through innovation\textsuperscript{43}.

4.26 Innovation is about changing processes or creating more effective processes, products and ideas. This not only require businesses to have the right capabilities but also a collaboration or mentorship with partners.


4.27 R&D efforts are also often required. However, R&D are exploratory efforts which may not yield the expected results all the time. This may discourage businesses from pursuing future attempts, as R&D requires significant input of resources and efforts. During sluggish growth times, companies may be more inclined to channel their resources to activities that lift their bottom line.

4.28 This section of the recommendations explores how the government can help to encourage innovation amongst businesses.

Acknowledgement of Contribution towards Co-Innovation

4.29 The Partnerships for Capability Transformation (PACT) programme is an initiative where SPRING Singapore or appointed organisations works with large enterprises to identify and implement collaborative projects between large enterprises and local SMEs.

4.30 These projects focus on enhancing the capabilities of the SMEs, through adoption or creation of innovative solutions, processes and products. Large enterprises play a key role in this programme, by providing the know-hows and allowing SMEs to test-bed their prototypes in actual working environments.

4.31 Through the PACT programme, SMEs can be supported for approved projects via the Capability Development Grant (CDG). SMEs will receive a Letter of Offer notifying them of the approved funding amount (up to 70 percent of qualifying costs).

4.32 There had been exceptions whereby support for cost incurred under the PACT programme was accorded to large enterprises for their collaboration with SMEs, but these were on a case-by-case basis. Business leaders provided feedback that given the role large enterprises play under the PACT programme, it would be equitable to
formally recognise their contributions and reimburse them for costs such as manpower, machine downtime and consumables, which would otherwise not have been incurred if they did not participate in the PACT programme.

**Recommendation**

Formally recognise, via a Letter of Offer or equivalent, the contribution of partnering large enterprises, thereby allowing cost-recovery of resources attributed to the participation of such projects by these large enterprises.

---

**Encourage Collaborative Research in Development of Intellectual Property**

4.33 Headstart allows SMEs that enter into a Research Collaboration Agreement (RCA) with A*STAR to enjoy royalty-free and exclusive IP licenses for the first 18 months.

4.34 The 18 month exclusive and royalty free period is not only insufficient for SMEs to commercialise a product but can also be potentially disadvantageous to the SME who had conceptualised the ideas and contributed to the development of the IP, as competitors would be able to leverage on the IP after the 18-month exclusivity period.

**Recommendation**

Enhance the Headstart programme to grant SMEs the option to either acquire the foreground IP generated or directly extend the IP’s exclusivity to 36 months to facilitate successful commercialisation.
Recognising Efforts in Research and Development

4.35 Some SMEs face difficulties in getting government support for R&D efforts. Based on feedback received, this is mainly due to the differences between the tax definition of R&D and SMEs’ efforts in their respective process/product developments initiatives.

4.36 According to IRAS, a qualifying R&D project must meet the following three requirements:44:
   a. Objective is to:
      i. Acquire new knowledge;
      ii. Create new products or processes; or
      iii. Improve existing products or processes.
   b. It involves novelty or technical risk.
   c. It is systematic, investigative and experimental study in a field of science or technology.

4.37 The merits of R&D activities can be subjective and the investment put in by companies also varies depending on the type of R&D work performed. Granting of government support by the various agencies for R&D and related activities can be based on criteria such as patent-related costs, development of new products and enhanced productivity, instead of solely on the tax definition of R&D.

4.38 Feedback from the business community suggests that it is a difficult task for the assessing tax officer to fully appreciate the value and extent of these R&D activities, considering that the diverse span of industries and the different technical knowledge required when reviewing the applications. This was also reflected in PwC’s Proposals to Enhance Singapore’s Economy45 for Budget 2017 where it was commented that it was potentially challenging for tax officers’ to assess R&D projects. One of PwC’s recommendations thus called for the technical merits of

---

45 Proposals to enhance Singapore’s economy, PwC, 2016
enterprises’ R&D projects to be evaluated by the economic agency (instead of IRAS) responsible for awarding the grant or tax incentives.

**Recommendation**

Allow economic agencies responsible for the awarding of R&D incentives to assess the merits of SMEs’ R&D initiatives independently, instead of adhering strictly to the tax definition of R&D.

**Internationalisation**

4.39 The SME Development Survey 2016 shows that 81 percent of the respondents are starting to develop their overseas strategy, as compared to only 52 percent in 2015 with the manufacturing sector seeing the highest increase (33 percent) in plans to expand overseas.

4.40 Singapore’s small domestic market, is driving business owners to venture overseas to look for the next opportunity of growth. This is being reflected with close to half of the SMEs (46 percent) citing better industry growth prospects in an overseas market.

![Bar chart showing reasons for internationalisation](source: DP SME Development Survey 2016)
4.41 As companies explore the possibilities of entering larger and more complex markets, their exposure to risks and uncertainties will increase. Naturally, these businesses will require more support in order to succeed.

4.42 Finding suitable manpower to manage an overseas office, is amongst the top challenges SMEs encounter when internationalising. Hence, when qualified candidates are hired, integration of these in-market hired staff with the Singapore headquarters and training becomes crucial to the success of the business.

4.43 The successful alignment of an overseas arm to the parent company can directly impact the success of overseas ventures. It is important for businesses to invest time and effort to ensure that there is cross-border alignment among the workforce and that employees are working productively in teams that cut across cultural lines.

4.44 With internationalisation becoming increasingly prominent as a source of growth for SMEs, and the rapid development in emerging markets, government support schemes would provide a tailwind towards SMEs’ internationalisation efforts.

**Enhancing Support for Internationalisation**

4.45 Feedback from the business community revealed that IE Singapore’s Global Company Partnership (GCP) programme could be enhanced to provide better assistance to companies.

4.46 New markets are currently defined as markets where a company has not had sales of more than S$100,000 for any of the past three years (non-cumulative). This definition may hinder companies from accessing the necessary support they need,

---

47 The Mindset of Internationally Successful Companies, Lee D., RSM Chio Lim, 2013
especially when they are exploring large markets that have multiple regions or for sectors where S$100,000 could possibly be the size of one deal.

4.47 In relation to the exploration of larger markets, feedbacks from the business community cited that the current financial support under GCP, of up to 70% of costs incurred, capped at $100,000 per year to access new markets is insufficient.

4.48 GCP currently supports up to two business development staff who are posted to the new market. However, a larger workforce is usually required to grow operations in new markets. SMEs also provided feedback that hiring native staff from within the market can help provide better insights and enable the business to localise at a faster pace.

**Recommendation**

Enhance the Global Company Partnership programme:

- Increase the sales turnover from $100,000 to $300,000 in the definition of new markets
- Allow SMEs to claim costs for up to five staff, inclusive of staff hired from the new market
- Increase support quantum from $100,000 to $300,000 a year
- Extend support from 12 months to 24 months for up to 70 percent of costs incurred
Strengthening Local Business’s Overseas Venture

4.49 Training Work Permits (TWP) and Training Employment Passes (TEP) enable businesses to bring their overseas staff to Singapore for training.

4.50 The number of trainees on TWP which an enterprise can bring in is capped at the company’s foreign worker quota, and will be subjected to the prevailing rates of foreign worker levies. Companies that have exhausted their quota, will not be able to apply for TWPs.

4.51 Although trainees on TEPs do not affect the quota nor are they subjected to levies; each trainee must be earning a fixed monthly salary of at least S$3,000 or be students from acceptable institutions to be eligible. This inflates an SME’s expenses when they bring in trainees to Singapore on the TEP. For comparison, the average monthly salaries of employees from non-manufacturing sectors in Vietnam and Taiwan are US$424 and US$1,270 respectively\(^{48}\), which is considerably lower than the TEPs’ criteria.

4.52 The business community had also provided feedback that it is more productive to bring overseas in-market staff to Singapore’s headquarters for training, as there are proper training facilities available. At the same time, the overseas in-market staff can get to experience first-hand the working environment in Singapore and be better integrated with the company’s culture. This helps the SMEs to ensure the quality of their products and services are consistent with their Singapore operations.

Recommendation

Do not subject TEPs to qualifying salary and TWPs to foreign worker quota and levies.

\(^{48}\)2015 JETRO Survey on Business Conditions of Japanese Companies in Asia and Oceania, Japan External Trade Organisation, 2015
Developing Human Capital with Global Mind-Set

4.53 With internationalisation identified as a cornerstone for the growth of businesses, especially in an economy with a small domestic market\textsuperscript{49}, nurturing a Singaporean human capital pool with a global mind-set is of paramount importance.

4.54 The development of this resource pool requires businesses to offer more comprehensive packages and better career progression planning to the candidates. A key business concern here is the risk of the incumbent candidate exiting prematurely from the company after significant investments have been made towards his development.

4.55 SMEs are willing to offer competitive gratuity-based expatriate packages to Singaporeans who are based overseas, on the conditions that the hire demonstrates competencies in the overseas market and have stayed with the company for a reasonable period of time.

4.56 With more retrenched PMEs seeking employment in the job market\textsuperscript{50}, there are potential opportunities for SMEs to engage skilled and experienced local talents to helm their overseas ventures, provided the prospect’s expectations are met.


4.57 IE Singapore’s Overseas Market Attachment programme (see table below) can be enhanced to aid the development of Singaporean talent for globalised assignments.

### Supportable Activities

**Overseas Market Attachments**
Send your employees for overseas Learning & Development activities for:
- Pre-Market- Entry Feasibility Study
- Pre-Posting Induction
- Business Capability or Technical Knowledge Acquisition

It should include at least one experienced mentor who can guide your staff throughout the attachment. The mentor can be a company’s employee or business associate based in attachment markets, as long as they have relevant expertise and experience to develop the staff.

### Financial Support

**For SMEs:**
Up to 70% of costs incurred for nominated Singaporean and PR employees on the overseas attachment. Valid from 1 April 2015 to 31 March 2018

**For non-SMEs:**
Up to 50% of the costs incurred for nominated Singaporean and PR employees on the overseas attachment.

Supportable areas include:
- One return economy class airfare for each trainee from Singapore to the attachment market
- Basic salary including employer’s CPF contribution of the trainee during the training period, capped at six months
- Third party pre departure training including non-mother tongue language classes or country etiquette courses

*Source: IE Singapore Website*

**Recommendation**

Offer support on 100 percent of cost for staff on overseas deployment for the first year and up to 70 percent in the subsequent two years for companies who have gone through the overseas market attachment programme.

**Collaborative Strategy for Internationalisation**

4.58 Traditionally, local SMEs play a supporting role as subcontractors to the MNCs operating in Singapore. Many do not possess the requisite track record to
internationalise successfully without the help of larger enterprises willing to partner them when undertaking overseas projects.

4.59 In economies such as Korea, Japan and Taiwan, large local enterprises have been noted to choose their local SMEs as their subcontractors/partners when they embark on overseas projects – this exposure allows their SMEs to gain exposure to overseas markets and potential partners. The government could do more to encourage large local enterprises, GLCs and Temasek portfolio companies to subcontract or partner SMEs for overseas projects.

**Recommendation**

The government to provide support through tax credits or special tax rebates to spur collaboration for large local enterprises to subcontract/partner SMEs for overseas projects.

---

**Manpower and Productivity**

4.60 Productivity improvement continues to be the top cost management strategy for SMEs. Even though much government support is in place (Automation Support Package and Workforce Singapore (WSG) initiatives), to help businesses become more efficient, productivity growth is lacklustre, increasing only 0.1 percent as compared to 2015.

4.61 This final section of the broad-base recommendations looks at strengthening and driving the adoption of what has been put in place by the government for productivity improvement, and enhancing the help for SMEs to hire PMEs.

---

51 DP Info SME Development Survey 2016, DP Information Group, 2016
Culture Transformation to Tackle the Fast Evolving Business Environment

4.62 With the development of disruptive technologies and business models, it has become increasingly challenging for traditional SMEs, which have relied heavily on the commitment to their craft and pursuit of quality, to remain competitive.

4.63 Singapore businesses are putting in efforts to train and enhance the skills of the workforce. However, in addition to skills upgrading, an overall shift in the SMEs’ mind-set and culture has to take place, in order to ensure the competitiveness of these enterprises.

4.64 The change in working culture will help drive business transformation, which is essential for today’s SMEs to stay relevant in the fast evolving environment. Cultural change and mind-set shifts are company-wide initiatives which are more effectively implemented using a top-down approach.

4.65 Business owners and C-suites will have to be equipped with the necessary foresight, mind-set, skillset and tools to effectively transform their workplace culture and to drive the future development of their enterprises.

**Recommendation**

Include SME Leaders (including business owners and C-suites) for funding support in leadership training schemes.

---

53 Speech by MOS (MTI) Dr Koh Poh Koon During the COS Debate under Head V on Thursday 7 April 2016, MTI, 2016
Augmenting PMEs Capabilities for Different Sectors

4.66 The Straits Times reported in March 2016 that (mature) PMEs have been hard hit by job redundancies. Of the Singaporeans and permanent residents laid off last year, 71.1 percent were PMEs, according to MOM figures, and nearly two-thirds of resident workers made redundant in 2015 were aged 40 and above.

4.67 It is important that there are appropriate job and skill matching during placement of PMEs to ensure the optimal deployment of human capital in Singapore. The Career Support Programme (CSP) from WSG currently supports businesses with wage supplements for up to 12 months, when the new PME hire goes through on job training (OJT).

4.68 The SME Development Survey 2016 found that 78 percent of SMEs surveyed are open to hiring PMEs over the age of 40, with the majority (83 percent) looking to hire these PMEs on a full-time basis. The SMEC heard feedback that in the hiring of experienced PMEs, SMEs are concerned with retention issues as highly qualified PMEs may return to their original trade or seek employment with larger firms when the opportunity arises. A training bond scheme tagged to CSP can be introduced, to safeguard the interest of SMEs that hires displaced PMEs.

4.69 PMEs employed into a different industry require time to equip themselves with new skills and be familiarised with the new sector. An enhancement to extend the support period will help smoothen PMEs’ transition into their new careers.

Recommendation

Enhance the CSP to extend wage supplement support to 18 months from the current 12 months, with the option to include a training bond.
5 CONCLUSION

5.1 This paper has highlighted the issues and challenges facing SMEs in the current economic climate, what are required to address these issues and measures to nurture more globally competitive companies.

<table>
<thead>
<tr>
<th>NURTURE GLOBAL COMPETITIVE COMPANIES</th>
</tr>
</thead>
</table>
| **1.** | a) Agencies-in-charge of their respective Industry Transformation Maps to be assigned a target on the number of GCCs to be developed.  
| | b) Introduce incentive schemes to attract innovative companies to anchor in Singapore, with the condition that they enter into a joint venture with local companies.  
| **2.** | The government to commission a study to assess the feasibility of establishing a private bourse for innovative companies to raise capital.  
| **3.** | The government to study the feasibility of implementing a framework to enable entrepreneurs and investors, particularly those in high-technology industries, to protect important assets and investors’ interests so that distressed businesses can find solutions to alleviate their situation.  
| **4.** | a) The government to review and refine the criteria for EP and PEP to take into account the unique profiles which characterises entrepreneurial talents.  
| | b) Review the work pass requirements to allow entrepreneurs with innovative and/or disruptive technologies to be granted an Entrepass, on the condition they enter into a joint venture with qualified local enterprises.  
| **5.** | a) Expand the IPFS to include IP acquisition financing.  
| | b) The government to co-share a higher risk quantum (currently at 50 percent) for loans under the IPFS.  

6. Government to formulate and implement policies to better commercialise the intellectual property developed by public sector research institutes and institutes of higher learning.

### BROAD-BASED SUPPORT FOR SMES

7. The government to hold back any planned increase in Foreign Worker Levy across all sectors for 36 months.

8. The government to study, review and streamline compliance, regulatory related costs, requirements and approving framework, starting with pilot sectors such as advanced manufacturing and food services.

9. Government landlords to provide rental rebates for all industrial, commercial and retail properties.

10. Government landlords to take the lead in adopting the Fair Tenancy Framework.

11. The government to commission a study on the implementation of setting up a national B2B platform.

12. Enhance the existing Working Capital Loan by raising the loan cap beyond $300,000 and increase the risk quantum co-shared (currently at 50 percent) by the government.

13. Formally recognise, via a Letter of Offer or equivalent, the contribution of partnering large enterprises, thereby allowing cost-recovery of resources attributed to the participation of such projects by these large enterprises.

14. Enhance the Headstart programme to grant SMEs the option to either acquire the foreground IP generated or directly extend the IP’s exclusivity to 36 months to facilitate successful commercialisation.
<table>
<thead>
<tr>
<th>15.</th>
<th>Allow economic agencies responsible for the awarding of R&amp;D incentives to assess the merits of SMEs’ R&amp;D initiatives independently, instead of adhering strictly to the tax definition of R&amp;D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.</td>
<td>Enhance the Global Company Partnership programme:  a) Increase the sales turnover from $100,000 to $300,000 in the definition of new markets  b) Allow SMEs to claim costs for up to five staff, inclusive of staff hired from the new market  c) Increase support quantum from $100,000 to $300,000 a year  d) Extend support from 12 months to 24 months for up to 70 percent of costs incurred</td>
</tr>
<tr>
<td>17.</td>
<td>Do not subject TEPs to qualifying salary and TWPs to foreign worker quota and levies.</td>
</tr>
<tr>
<td>18.</td>
<td>Offer support on 100 percent of cost for staff on overseas deployment for the first year and up to 70 percent in the subsequent two years for companies who have gone through the overseas market attachment programme.</td>
</tr>
<tr>
<td>19.</td>
<td>The government to provide support through tax credits or special tax rebates to spur collaboration for large local enterprises to subcontract/partner SMEs for overseas projects.</td>
</tr>
<tr>
<td>20.</td>
<td>Include SME Leaders (including business owners and C-suites) for funding support in leadership training schemes.</td>
</tr>
<tr>
<td>21.</td>
<td>Enhance the CSP to extend wage supplement support to 18 months from the current 12 months, with the option to include a training bond.</td>
</tr>
</tbody>
</table>
ANNEX

SME Committee

Advisors
Ms Sim Ann  Senior Minister of State  Ministry of Trade & Industry
Mr Teo Ser Luck  Minister of State  Ministry of Manpower

Chairman
Mr Lawrence Leow  Chairman & CEO  Crescendas Group

Vice-Chairman
Mr Melvin Tan  Managing Director  Cyclect Group

Members
Mr Teo Siong Seng  Chairman  SBF
Mr Abdul Rohim Sarip  Immediate Past President  SMCCI
Mr Casey Kesavan  Council Member  SICCI
Mr Dennis Foo  President  SNBA
Ms Donna Lee  President  FLA
Mr Douglas Foo  President  SMF
Council Member  SNEF
Mr Ernie Koh  President  SFIC
Mr Kenneth Loo  President  SCAL
Mr Kurt Wee  President  ASME
Mr Lau Tai San  Vice President  SCCCI
Mr R Dhinakaran  President  SRA
Dr Ricky Souw  Immediate Past Chairman  SPETA
Member  SiTF
Mr Roderick Chia  Chairman  SLA
Mr Stanley Lim  Consultant  SCIC
Mr Ooi Tiat Jin  Chairman, SME Committee  SCIC
Mrs Wong Sioe Hong  Vice President  SRA
Ms Audrey Yap  Managing Partner  Yusarn Audrey
Mdm Cynthia Phua  Consultant
Mr Linus Goh  Head, Global Commercial Banking  OCBC Bank
Mr Saktiandi Supaat  Executive Vice President  Maybank Group
Ms Susan Chong  CEO  Greenpac (S) Pte Ltd
Sub-committee on Cost of Doing Business

Chairman
Mr Kurt Wee President ASME

Vice-Chairman
Mr Tay Hong Beng Partner, Head of Tax KPMG

Members
Mr Kenneth Loo President SCAL
Mr Benjamin Tan Treasurer SCAL
Mrs Wong Sioe Hong Vice President SRA
Mr Adrin Loi Executive Chairman Ya Kun International
Mr Alvin Yapp Head, Corporate Affairs BusAds
Mdm Cynthia Phua Consultant
Mr See Chern Yang Legal Director Premier Law LLC
Mr Steven Chen Executive Chairman NAT Aire Builder

Sub-committee on Financing

Chairman
Mr Linus Goh Head, Global Commercial Banking OCBC Bank

Members
Mr Steven Koh Advisor SPETA
Mr Roderick Chia Member SITF
Mr Lawrence Yong CEO Moolah Sense
Mr Nicholas Malcomson Director Pay2Home Direct
Ms Chew Mok Lee Assistant CEO SPRING Singapore
Mr Dennis Kuah Deputy Director SPRING Singapore
Ms Gina Lim Group Director IE Singapore
Mr Paul Ng Divisional Director IE Singapore
Sub-committee on Innovation

Chairman
Ms Audrey Yap Managing Partner Yusarn Audrey

Vice-Chairman
Mr Mark Lee President TaFf

Members
Dr Ricky Souw Immediate Past Chairman SPETA
Mr Roderick Chia Member SiTF
Mr Ryan Chioh Honorary Secretary SMF
Mr Adrian Long General Manager V3 Smart Technologies Pte Ltd
Ms Annie Tan Director TSK Foods Pte Ltd
Mr Christopher Ng Group CEO Rigel Technology (S) Pte Ltd
Mdm Cynthia Phua Consultant
Mr Eugene Tan Managing Director XentiQ Pte Ltd
Dr Govindharaju Director Hyflux Ltd
Mr Melvin Tan Managing Director Cyclect Group
Mr Tan Jit Khoon Chief Executive Officer Winson Press Pte Ltd

Sub-committee on Internationalisation

Chairman
Mr Lau Tai San Vice President SCCCI

Vice-Chairman
Mr Abdul Rohim Sarip Immediate Past President SMCCI

Members
Mr David Tan Vice President SFMA
Ms Donna Lee President FLA
Mr Ernie Koh President SFIC
Mr Andrew Khng Director Tiong Seng Contractors (Pte) Ltd
Dr Clive Choo Lecturer NTU
Dr Kar Wong Founder & Managing Director Advanced Holdings Ltd
Mr Ken Koh Managing Director Yang Kee Logistics Pte Ltd
Mr Kelvin Chia Senior Partner Kelvin Chia Partnership
Sub-committee on Internationalisation (continue from previous)
Mr Low Ming Wah  President & CEO  Micro-Mechanics (Holdings) Ltd
Ms Wong Lee Ling  Divisional Director  IE Singapore

Sub-committee on Manpower and Productivity

Chairman
Ms Susan Chong  CEO  Greenpac (S) Pte Ltd

Vice-Chairman
Mr Dennis Foo  President  SNBA

Members
Mr Ang Kiam Meng  EXCO Member  RAS
Mr Danny Lien  President  SASS
Mr Erman Tan  President  SHRI
Mr Jeffrey Yu  Council Member  SCAL
Mr Kay Kong Swan  Deputy Chairman  SLA
Mr R Dhinakaran  President  SRA
Ms Adele Png  Head, Talent Acquisition  Philips Electronics (Singapore)
Mr Foo Chek Wee  Group HR Director  Zalora
Mr Francis Koh  Regional CEO – SEA TS Kelly Asia Pacific

Rental Practices Working Group (RPWG)

Chairman
Mdm Cynthia Phua  Consultant

Members
Mr Abdul Rohim Sarip  Immediate Past President  SMCCI
Mr Alan Goh  EXCO Member  RAS
Mr Ang Yuit  Vice President  ASME
Mr Anthony Gan  Executive Director  SRA
Mr Wei Chan  Assistant Honorary Secretary  RAS
Mr Calvin Yeo  Executive Director & Head of Office Advisory  Knight Frank (Singapore)
Ms Frances Chang Yoke Ping  Property and Projects Director  Cold Storage Singapore (1983) Pte Ltd
Rental Practices Working Group (continue from previous)

Ms Priscilla Yap  Senior Manager, Real Estate  NTUC FairPrice
Mr See Chern Yang  Legal Director  Premier Law LLC
Mr Tay Kah Poh  Executive Director, Agency Services  Knight Frank (Singapore)

Government Procurement Working Group (GPWG)

Chairman
Mr Andrew Khng  Director  Tiong Seng Contractors (Pte) Ltd

Members
Mr Nelson Tee  President  STAS
Mr Theodore Khng  President  YEA
Ms Christina Koh  Managing Director  Harvest Link International
Mr Kelvin Chia  Senior Partner  Kelvin Chia Partnership
Mr Teo Teck Chye  General Manager  AMOS International

SMEC Secretariat

Mr Ho Meng Kit  Chief Executive Officer, SBF
Mr Koh Tat Liang  Assistant Executive Director, SBF
Mr Lin Guoliang  Deputy Director, SME Committee, SBF
Mr Lai Wei Bing  Senior Manager, SME Committee, SBF
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>Assignment for the Benefit of Creditors</td>
</tr>
<tr>
<td>ASME</td>
<td>Association of Small and Medium Enterprises</td>
</tr>
<tr>
<td>B2B</td>
<td>Business-to-Business</td>
</tr>
<tr>
<td>B2C</td>
<td>Business-to-Consumer</td>
</tr>
<tr>
<td>BCG</td>
<td>Boston Consulting Group</td>
</tr>
<tr>
<td>BL</td>
<td>Bridging Loan</td>
</tr>
<tr>
<td>CDG</td>
<td>Capability Development Grant</td>
</tr>
<tr>
<td>COE</td>
<td>Certificate of Entitlement</td>
</tr>
<tr>
<td>CSP</td>
<td>Career Support Programme</td>
</tr>
<tr>
<td>CSRC</td>
<td>China Securities Regulatory Commission</td>
</tr>
<tr>
<td>DBS</td>
<td>Development Bank of Singapore</td>
</tr>
<tr>
<td>EDB</td>
<td>Economic Development Board</td>
</tr>
<tr>
<td>EP</td>
<td>Employment Pass</td>
</tr>
<tr>
<td>ESC</td>
<td>Economic Strategies Committee</td>
</tr>
<tr>
<td>ESS</td>
<td>Economic Survey of Singapore</td>
</tr>
<tr>
<td>FLA</td>
<td>Franchising and Licensing Association (Singapore)</td>
</tr>
<tr>
<td>FTF</td>
<td>Fair Tenancy Framework</td>
</tr>
<tr>
<td>GCC</td>
<td>Globally Competitive Company</td>
</tr>
<tr>
<td>GCP</td>
<td>Global Company Partnership</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GLC</td>
<td>Government Linked Company</td>
</tr>
<tr>
<td>GST</td>
<td>Goods and Services Tax</td>
</tr>
<tr>
<td>HDB</td>
<td>Housing &amp; Development Board</td>
</tr>
<tr>
<td>IE Singapore</td>
<td>International Enterprise Singapore</td>
</tr>
<tr>
<td>IFS</td>
<td>Internationalisation Finance Scheme</td>
</tr>
<tr>
<td>IHL</td>
<td>Institute of Higher Learning</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IP</td>
<td>Intellectual Property</td>
</tr>
<tr>
<td>IPFS</td>
<td>Intellectual Property Financing Scheme</td>
</tr>
<tr>
<td>IPOS</td>
<td>Intellectual Property Office of Singapore</td>
</tr>
<tr>
<td>IRAS</td>
<td>Inland Revenue Authority of Singapore</td>
</tr>
<tr>
<td>ITM</td>
<td>Industry Transformation Map</td>
</tr>
<tr>
<td>ITP</td>
<td>Industry Transformation Programme</td>
</tr>
<tr>
<td>JTC</td>
<td>JTC Corporation</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
</tr>
<tr>
<td>M&amp;OE</td>
<td>Marine and Offshore Engineering</td>
</tr>
<tr>
<td>MAS</td>
<td>Monetary Authority of Singapore</td>
</tr>
<tr>
<td>MNC</td>
<td>Multi-national Company</td>
</tr>
<tr>
<td>MTI</td>
<td>Ministry of Trade and Industry</td>
</tr>
<tr>
<td>NBS</td>
<td>National Business Survey</td>
</tr>
<tr>
<td>NBS</td>
<td>National Business Survey</td>
</tr>
<tr>
<td>NEEQ</td>
<td>National Equities and Quotation</td>
</tr>
<tr>
<td>NTU</td>
<td>Nanyang Technological University</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OJT</td>
<td>On Job Training</td>
</tr>
<tr>
<td>OTC</td>
<td>Over-The-Counter</td>
</tr>
<tr>
<td>PACT</td>
<td>Partnerships for Capability Transformation</td>
</tr>
<tr>
<td>PEP</td>
<td>Personalised Employment Pass</td>
</tr>
<tr>
<td>PFI</td>
<td>Private Financial Institution</td>
</tr>
<tr>
<td>PME</td>
<td>Professionals, Managers and Executives</td>
</tr>
<tr>
<td>PRI</td>
<td>Public Research Institute</td>
</tr>
<tr>
<td>PwC</td>
<td>Pricewaterhouse Coopers LLP</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>RAS</td>
<td>Restaurant Association of Singapore</td>
</tr>
<tr>
<td>RCA</td>
<td>Research Collaboration Agreement</td>
</tr>
<tr>
<td>SASS</td>
<td>Singapore Association of Ship Suppliers and Services</td>
</tr>
<tr>
<td>SBF</td>
<td>Singapore Business Federation</td>
</tr>
<tr>
<td>SCAL</td>
<td>Singapore Contractors Association Limited</td>
</tr>
<tr>
<td>SCCCI</td>
<td>Singapore Chinese Chamber of Commerce and Industry</td>
</tr>
<tr>
<td>SFIC</td>
<td>Singapore Furniture Industries Council</td>
</tr>
<tr>
<td>SFMA</td>
<td>Singapore Food Manufacturer's Association</td>
</tr>
<tr>
<td>SGX</td>
<td>Singapore Stock Exchange</td>
</tr>
<tr>
<td>SHRI</td>
<td>Singapore Human Resources Institute</td>
</tr>
<tr>
<td>SIA</td>
<td>Singapore International Airlines</td>
</tr>
<tr>
<td>SICCI</td>
<td>Singapore Indian Chamber of Commerce and Industry</td>
</tr>
<tr>
<td>SiTF</td>
<td>Singapore Infocomm Technology Federation</td>
</tr>
<tr>
<td>SLA</td>
<td>Singapore Logistics Association</td>
</tr>
<tr>
<td>SMCCI</td>
<td>Singapore Malay Chamber of Commerce and Industry</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Sized Enterprise</td>
</tr>
<tr>
<td>SMEC</td>
<td>Small and Medium Sized Enterprises Committee</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Organization Name</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>SMF</td>
<td>Singapore Manufacturing Federation</td>
</tr>
<tr>
<td>SNBA</td>
<td>Singapore Nightlife Business Association</td>
</tr>
<tr>
<td>SNEF</td>
<td>Singapore National Employers Federation</td>
</tr>
<tr>
<td>SPETA</td>
<td>Singapore Precision Engineering and Technology Association</td>
</tr>
<tr>
<td>SPRING</td>
<td>Standards, Productivity and Innovation Board</td>
</tr>
<tr>
<td>SRA</td>
<td>Singapore Retailers Association</td>
</tr>
<tr>
<td>STAS</td>
<td>Specialist Trade Alliance of Singapore</td>
</tr>
<tr>
<td>TAC</td>
<td>Trade Association and Chamber</td>
</tr>
<tr>
<td>TaFf</td>
<td>Textile and Fashion Federation</td>
</tr>
<tr>
<td>TEP</td>
<td>Training Employment Pass</td>
</tr>
<tr>
<td>TPC</td>
<td>Temasek Portfolio Company</td>
</tr>
<tr>
<td>TWP</td>
<td>Training Work Permit</td>
</tr>
<tr>
<td>WCL</td>
<td>Working Capital Loan</td>
</tr>
<tr>
<td>WSG</td>
<td>Workforce Singapore</td>
</tr>
<tr>
<td>YEA</td>
<td>Young Entrepreneurs Association</td>
</tr>
</tbody>
</table>
References

1. State-owned enterprises in Singapore - historical insights into a potential model for reform, Tan CH et al, National University of Singapore, 2015
3. Innovation and economic growth, N. Rosenberg, Stanford University, 2004
4. Singapore Economy, Department of Statistics (Singapore), 2016
5. Economic Outlook No.100, Organization for Economic Co-operation and Development, 2016
8. World Economic Outlook, International Monetary Fund, 2016
14. SBF DP SME Index 4Q16-1Q17, DP Info Group, 2016
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Small and Medium Enterprises In Singapore and the New Economy, Lee B.C. &amp; Tan W.L., Singapore Management University, 2002</td>
</tr>
<tr>
<td>28</td>
<td>The Global Talent Competitiveness Index 2015-16, INSEAD, 2015</td>
</tr>
<tr>
<td>30</td>
<td>Global Innovation Index 2016, Cornell University, INSEAD and WIPO, 2016</td>
</tr>
<tr>
<td>32</td>
<td>Enquiries into Intellectual Property’s Economic Impact, OECD, 2015</td>
</tr>
<tr>
<td>34</td>
<td>DP Info SME Development Survey 2016, DP Information Group, 2016</td>
</tr>
</tbody>
</table>
45 Proposals to enhance Singapore’s economy, PwC, 2016
47 The Mindset of Internationally Successful Companies, Lee D., RSM Chio Lim, 2013
51 DP Info SME Development Survey 2016, DP Information Group, 2016
53 Speech by MOS (MTI) Dr Koh Poh Koon During the COS Debate under Head V on Thursday 7 April 2016, MTI, 2016