



Singapore Budget 2017

Singapore's Economic Future In The Midst Of Rising Anti-Globalisation Sentiments

Francis Tan

UOB Global Economics & Markets Research

31st March 2017

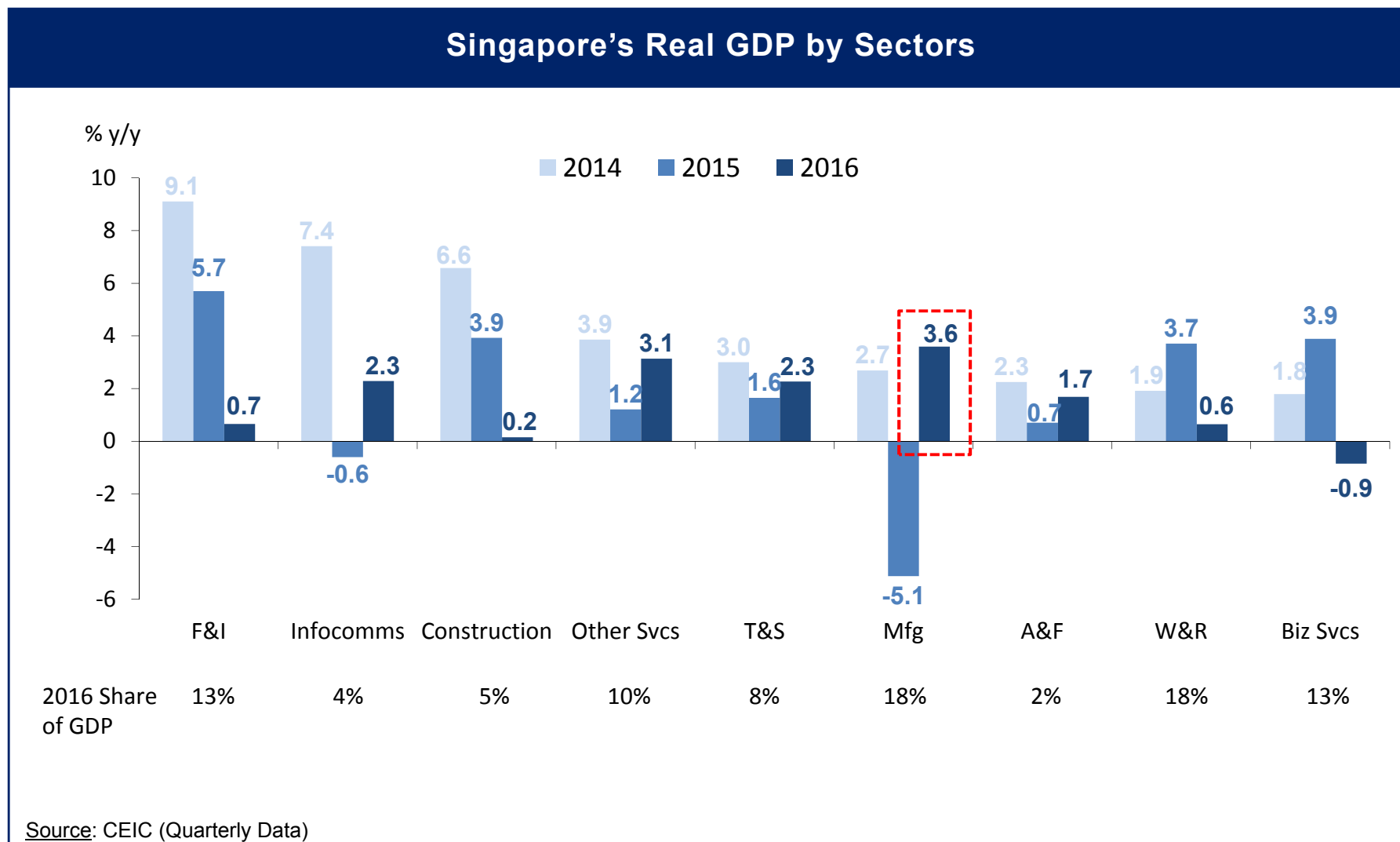
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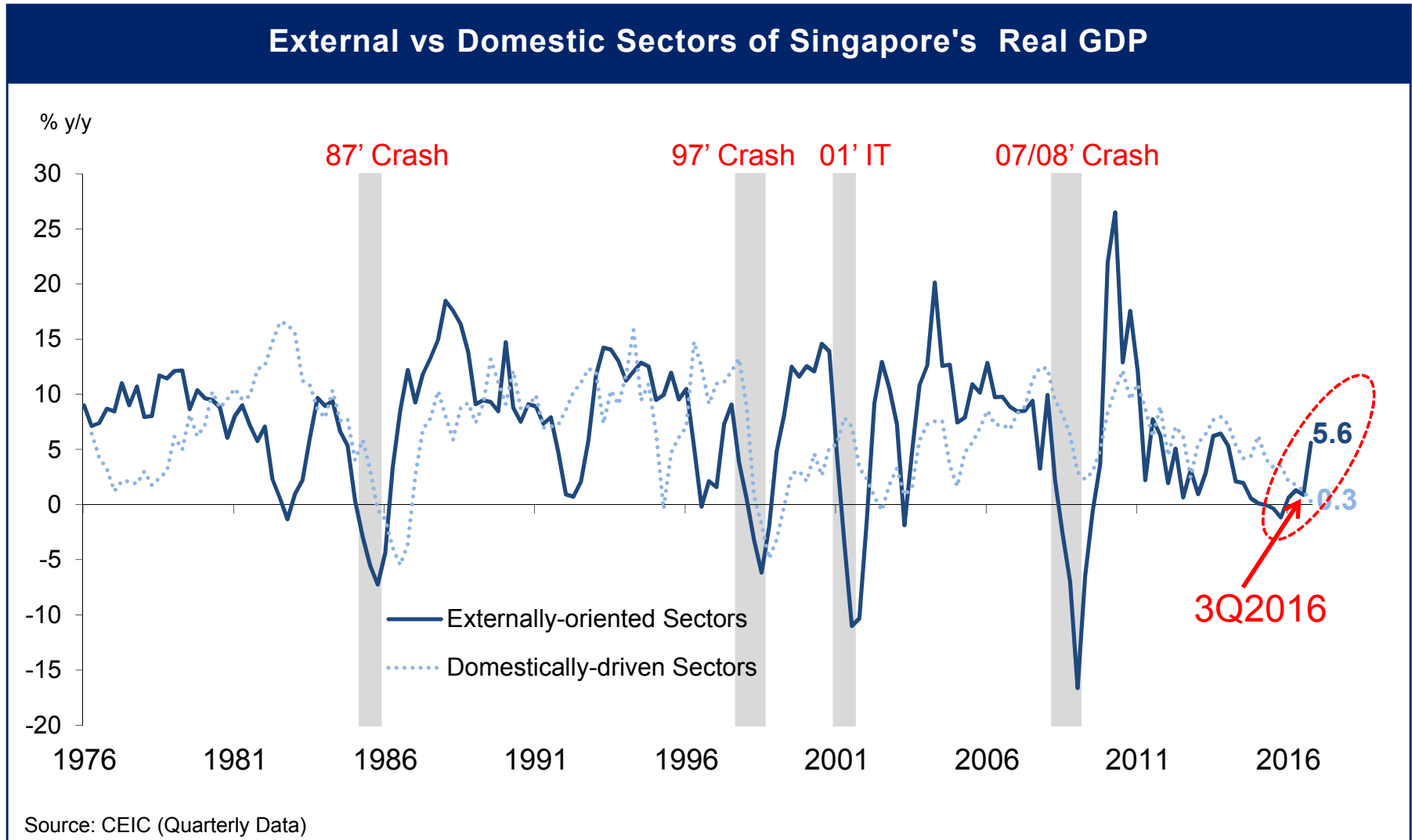
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Slowdown in Almost Every Sectors in 2016, But External Sectors Are Picking Up First

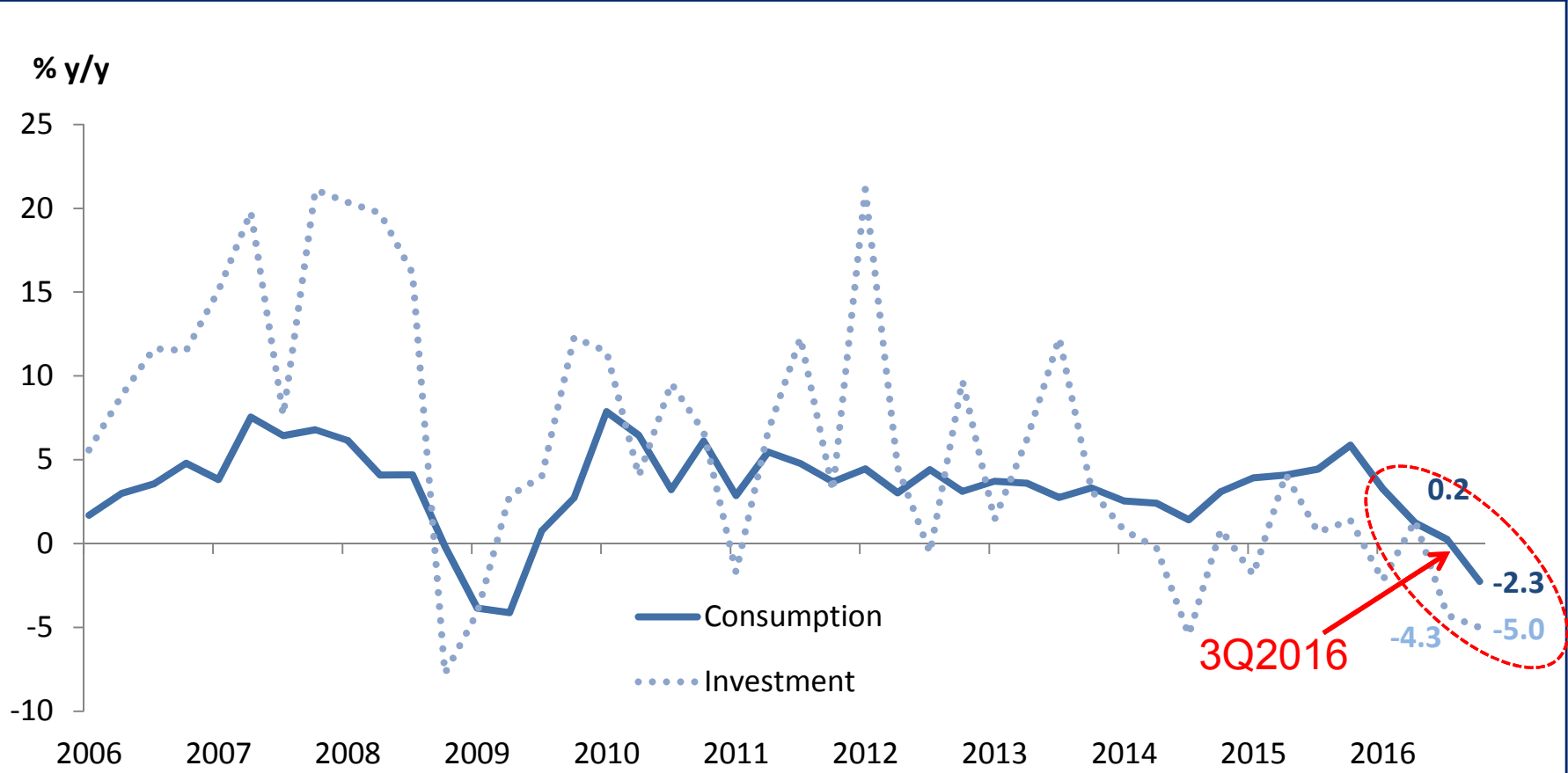


Bright Spots in External Sectors since 2H 2016



Nevertheless, Weak Consumption and Investment Growth

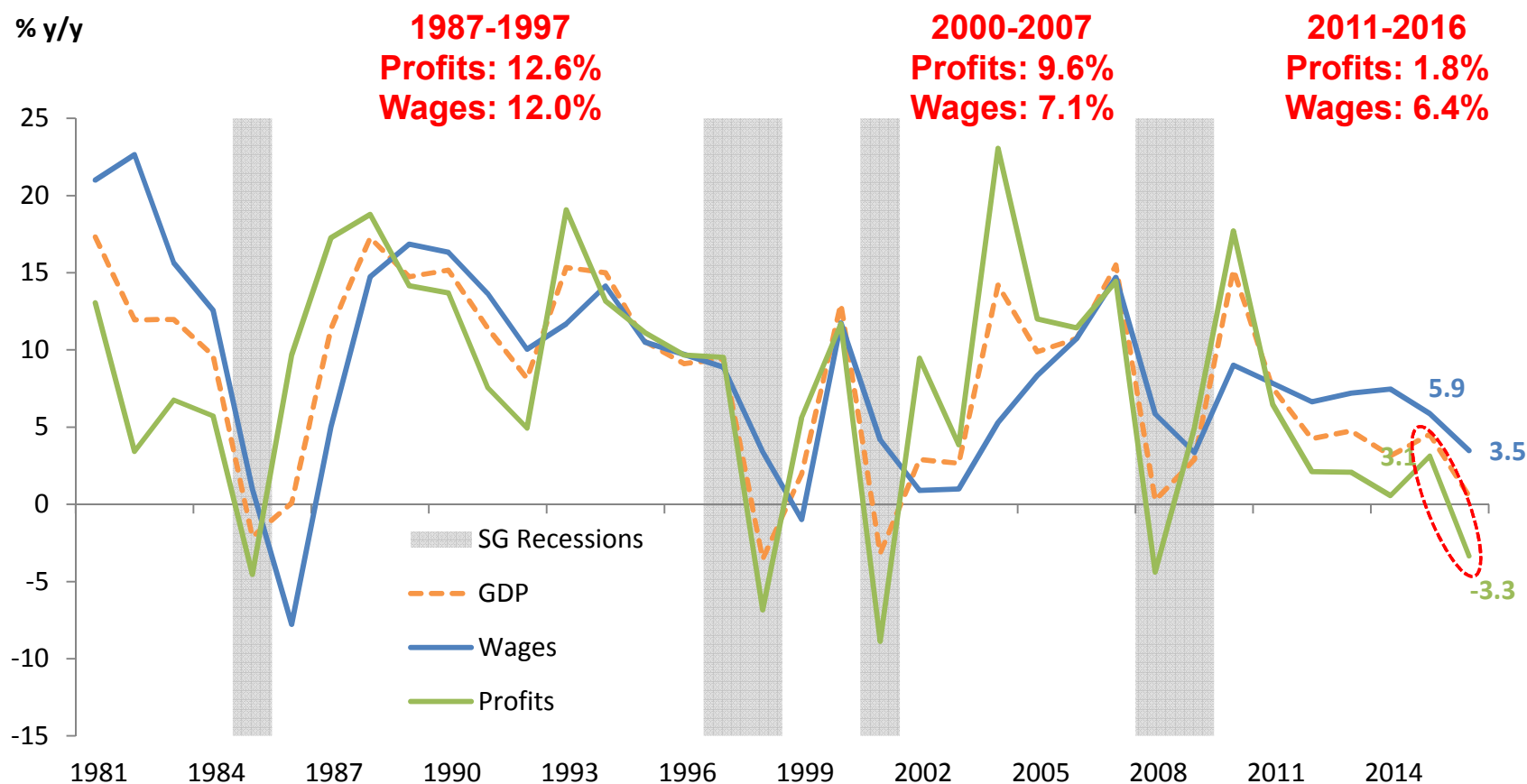
Consumption and Investment Growth



Source: CEIC (Annual Data)

Labour Market Tightness Since 2011 Resulted In Lower Profits Growth For Firms

Singapore's Real GDP By Expenditure



Source: CEIC (Annual Data)

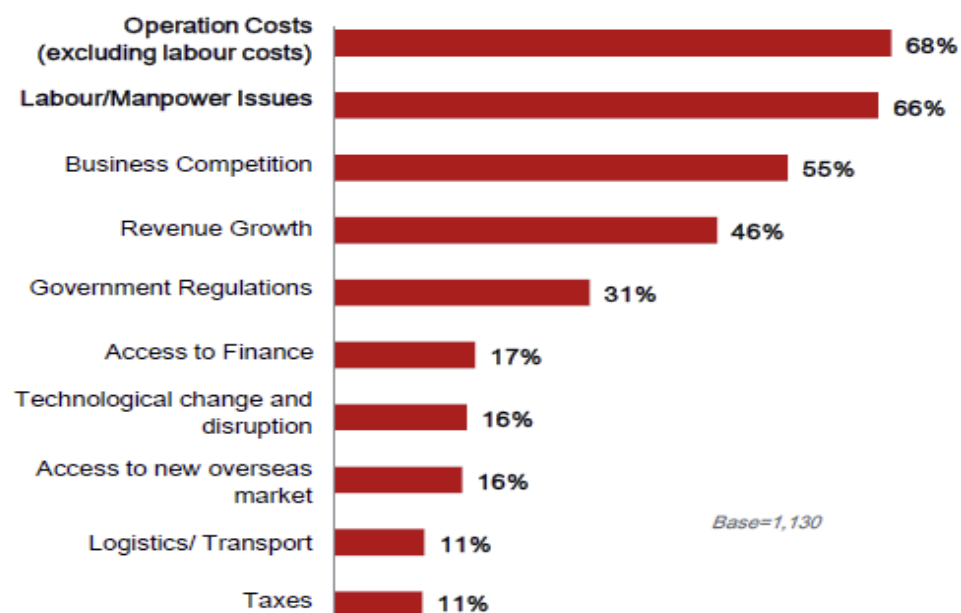
Rising business costs dominate as Budget debate kicks off



Reuters file photo

Parliament: Govt is keeping a close eye on business costs to ensure they do not rise excessively

Key challenges that businesses face:



Broad-based: Support for SMEs

Cost of Doing Business

- 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
- Manpower and rental related costs remain the top cost concerns from businesses
- 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.
- Expeditious approvals by the regulatory bodies for the sectors under their respective purviews would enhance the ease of doing business in Singapore

Broad-based: Support for SMEs

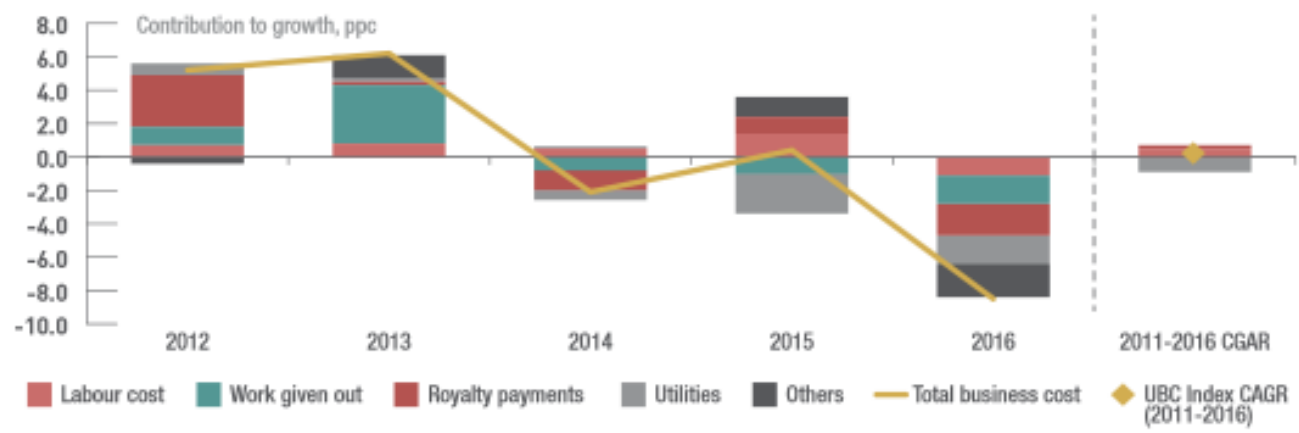
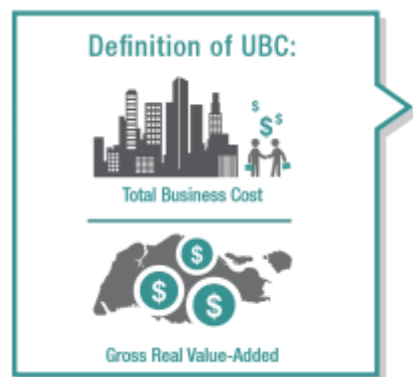
Cost of Doing Business

Reducing Manpower Related Costs

- 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.
- Coupled with the slowdown in economic growth and lowered demand for goods and services, the growth in Singapore's foreign workforce had abated.
- Any planned increase in Foreign Worker Levy should be held back to help businesses tide through the current period of protracted slow growth

Recommendation

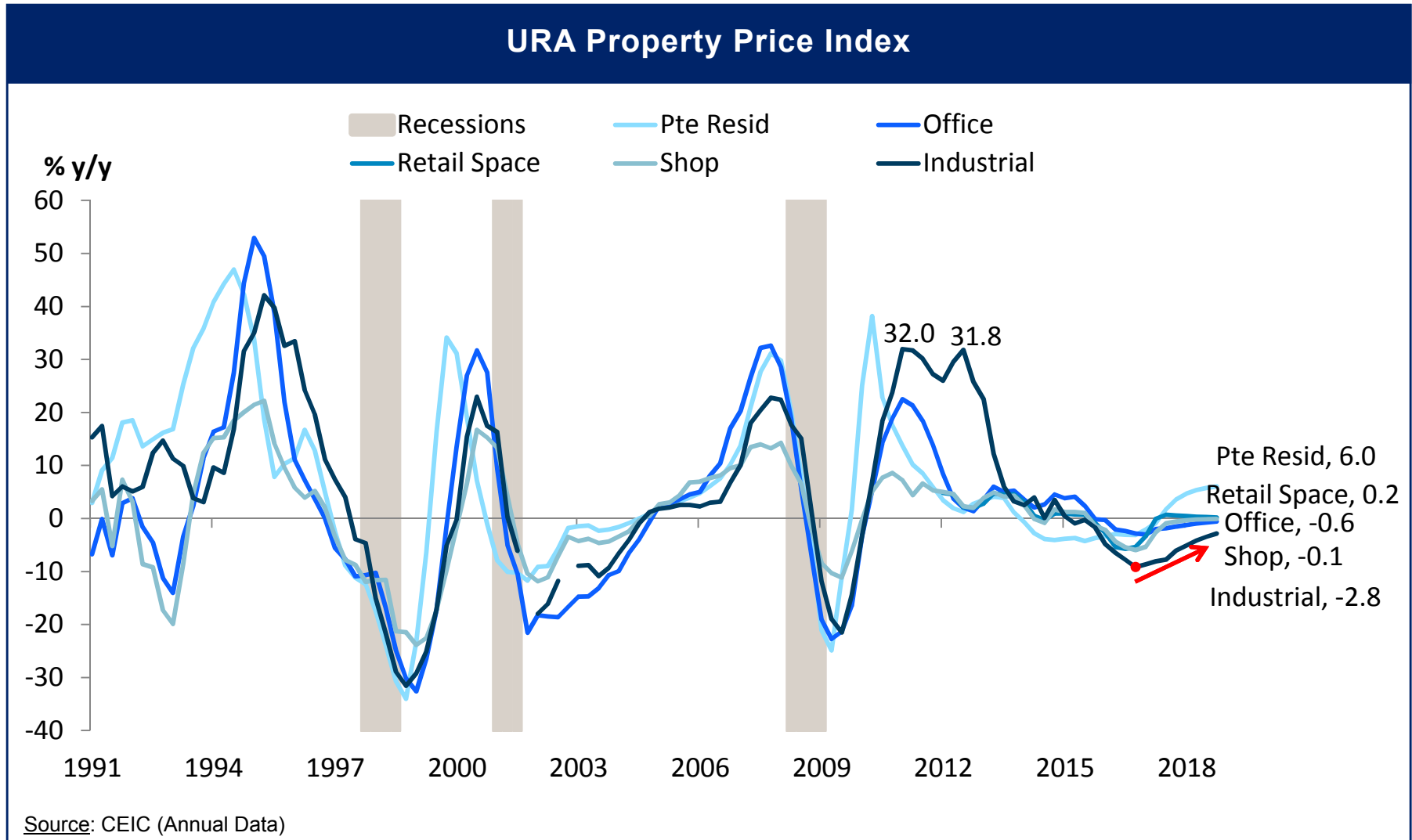
The government to hold back any planned increase in Foreign Worker Levy across all sectors for 36 months.



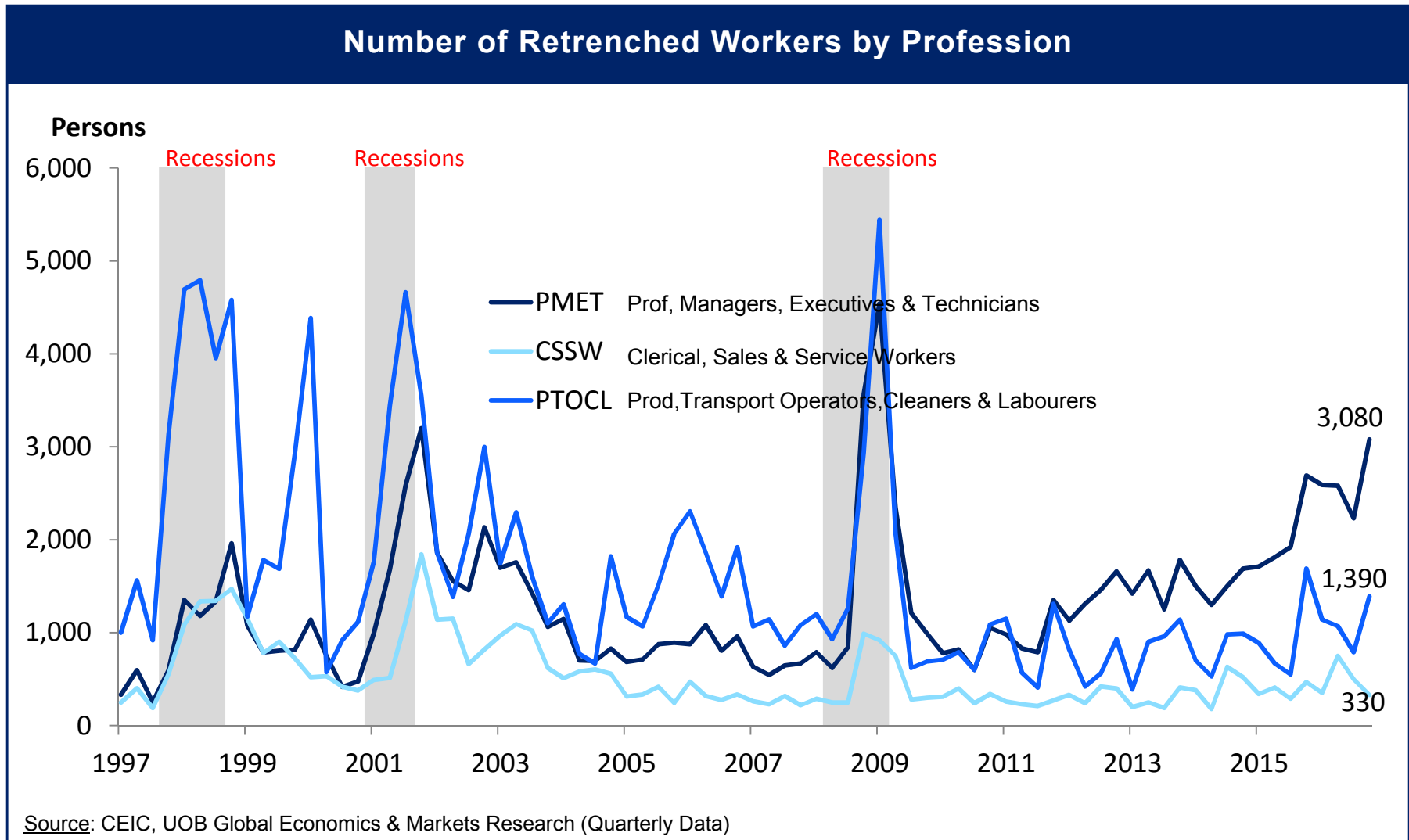
Looking ahead, overall unit labour cost and utilities cost are likely to increase, while rental cost is expected to continue to ease.



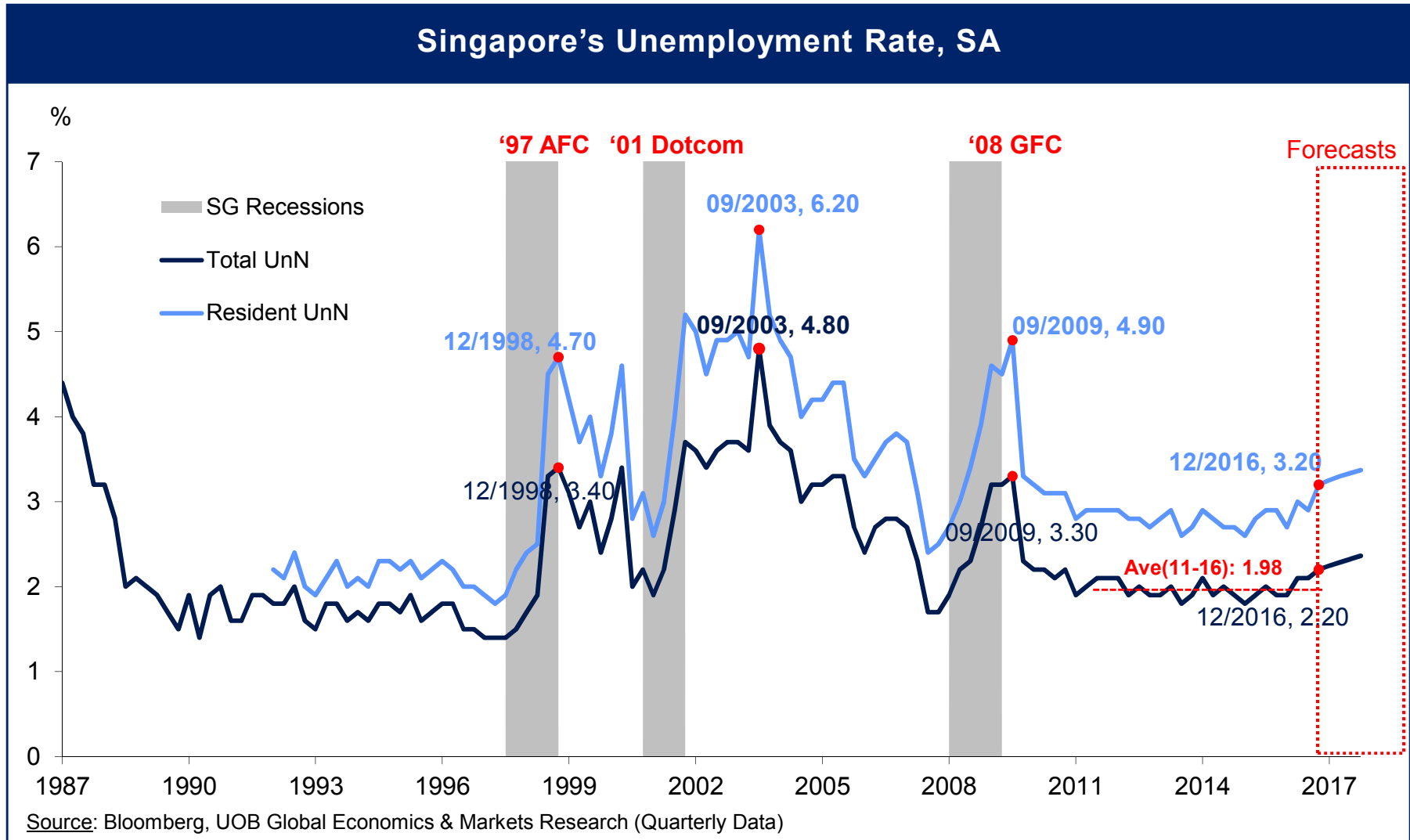
Forecasts To Contract At A Slower Pace



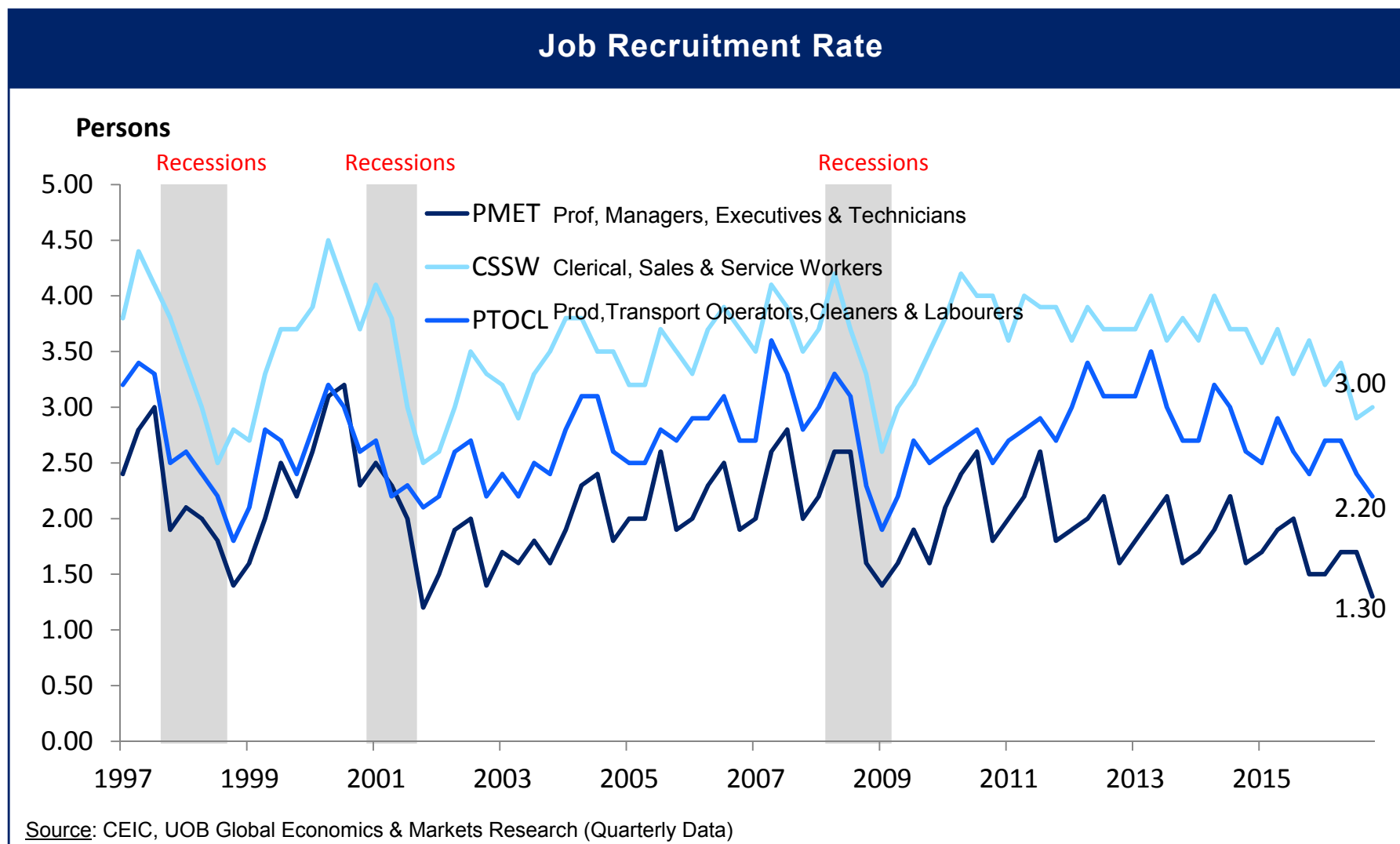
Retrenchment Rose To Highest Levels Since GFC



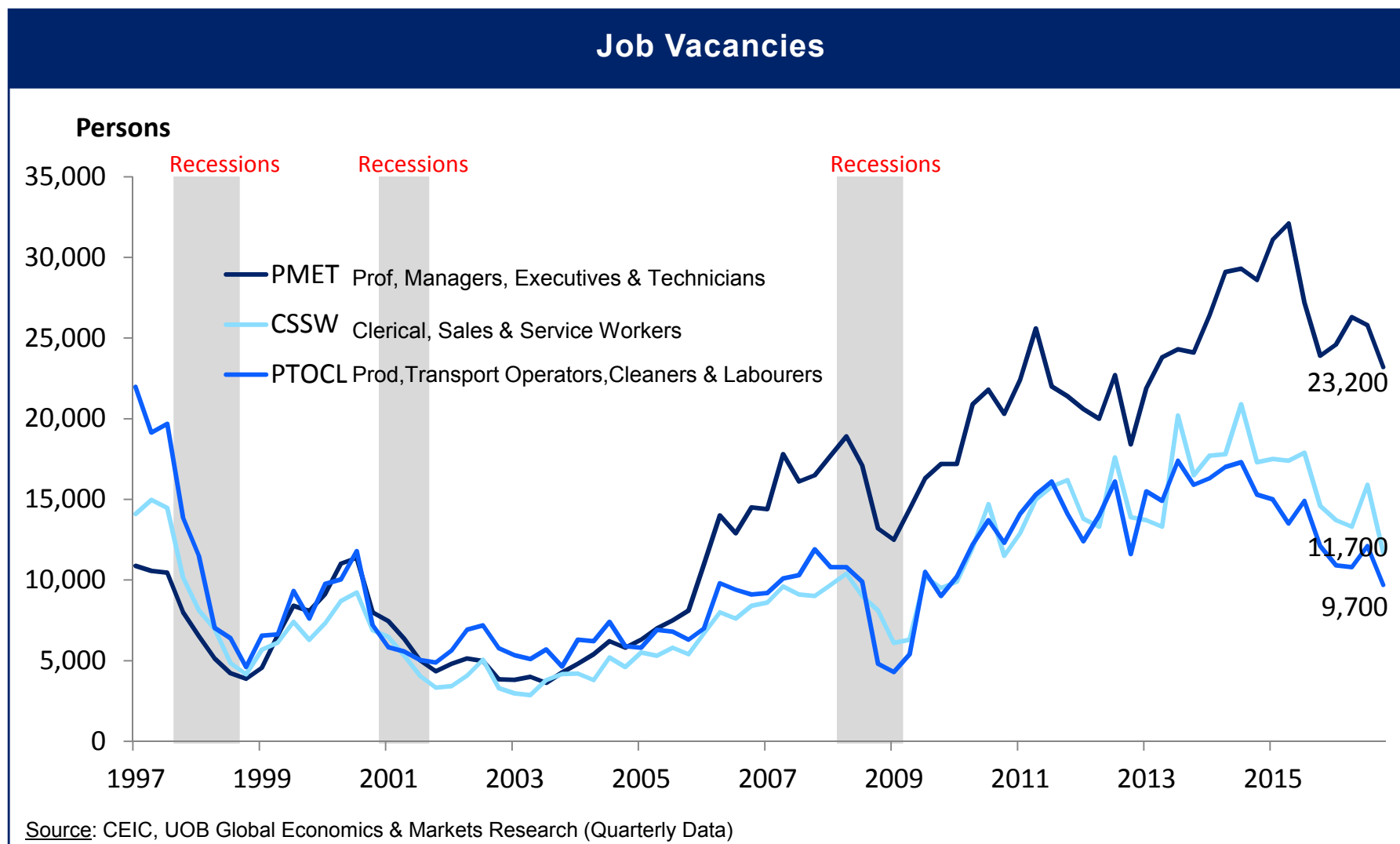
Unemployment Rates Creeping Higher



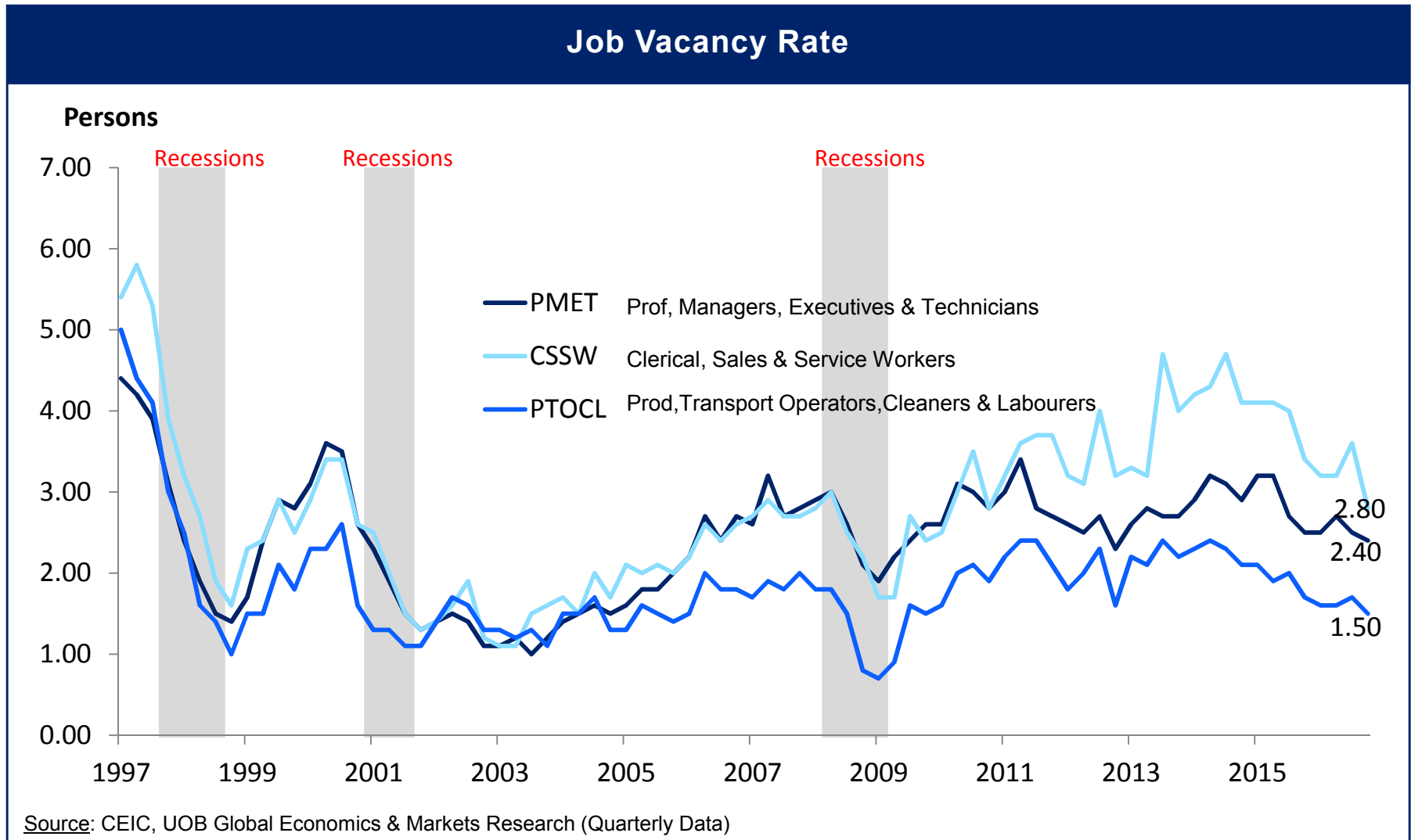
Employers Are Very Cautious In Hiring



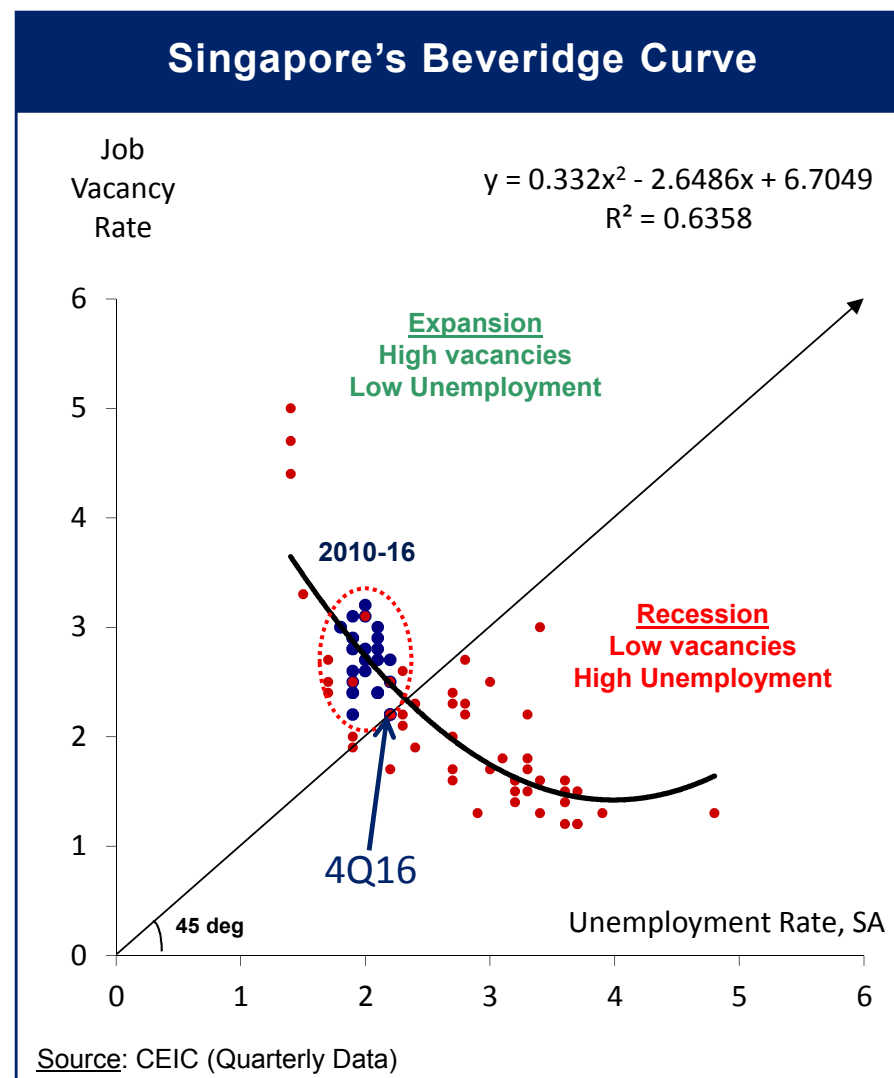
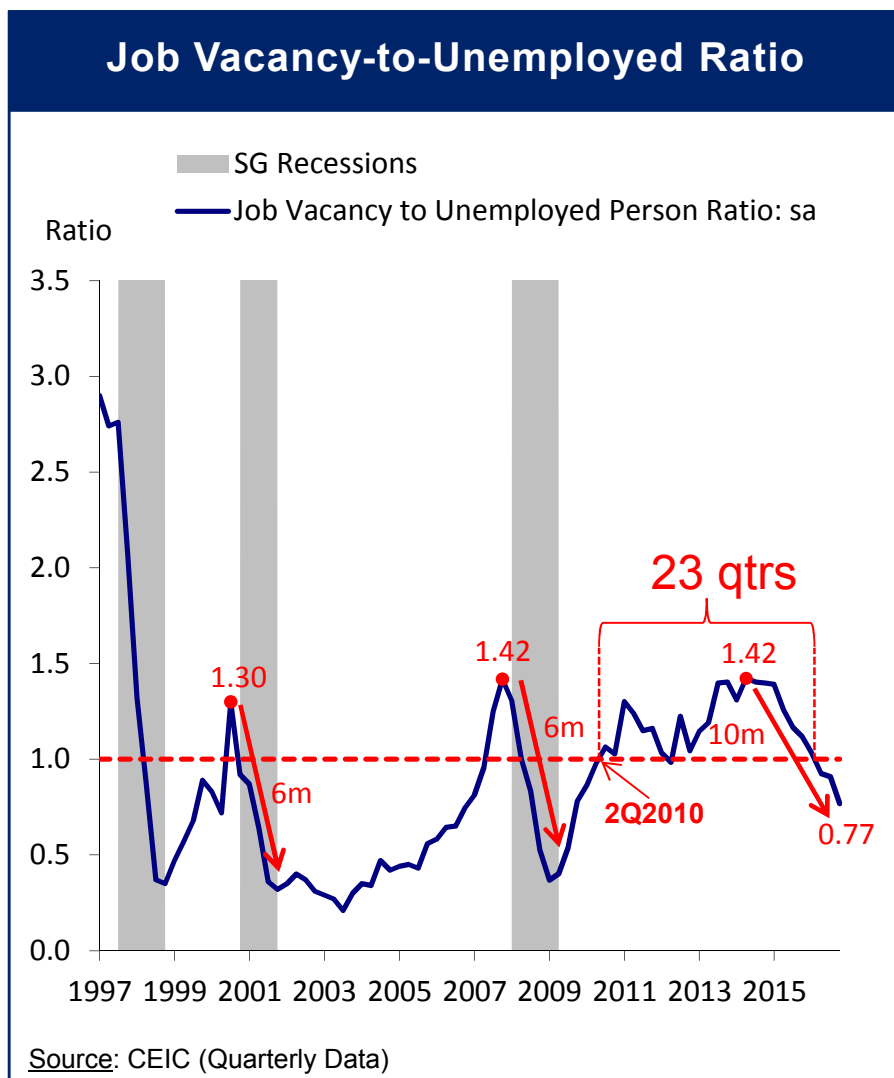
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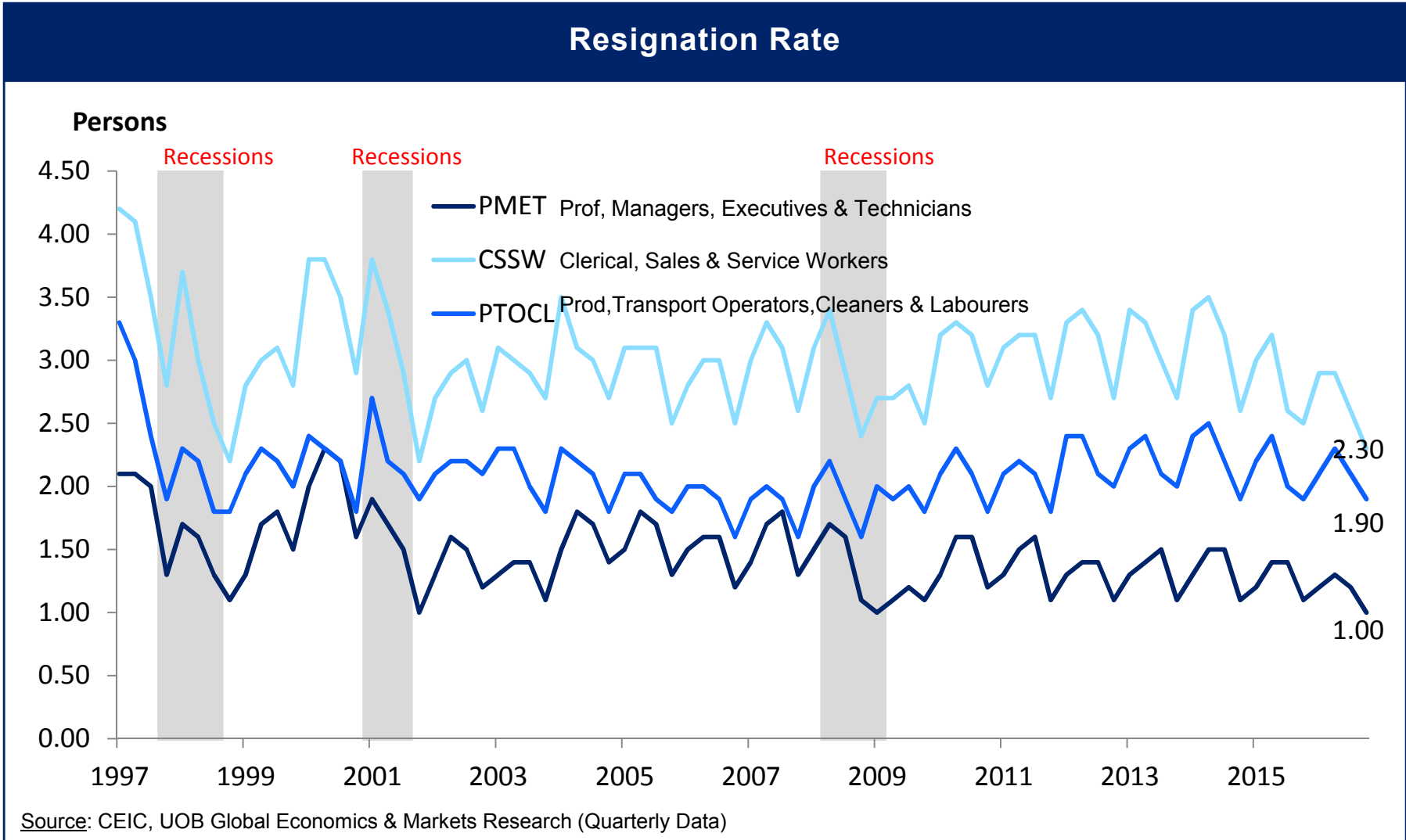
Employers Are Very Cautious In Hiring



Labour Market Is Not-So-Tight Now



And Employees Are Hanging On To Their Jobs Dearly



A Brief History of Our Economic Strategy



Source: Singapore Ministry of Trade & Industry



~~2016 Committee On The Future Economy~~

2010 Economic Strategies Committee

1. I

2. A

ent



own

3. Growing human and knowledge capital;
4. Creating high-value jobs for Singaporeans;
5. Maximising finite resources such as land and energy

$$Y = AL^{\beta} K^{\alpha}$$

2016 Committee On The Future Economy



Future growth industries and markets. Identify and design growth strategies for priority clusters in Singapore, and to enable companies to seize opportunities in the global marketplace.

Corporate capabilities and innovation. Recommend strategies to enable companies and industry clusters to develop innovative capacities, and use technology as well as new business models and partnerships to create value.

Jobs and skills. Assess the impact of demographics and technology on the labour force, and recommend strategies to create and re-design jobs, and to equip Singaporeans with the skillsets needed for the future.

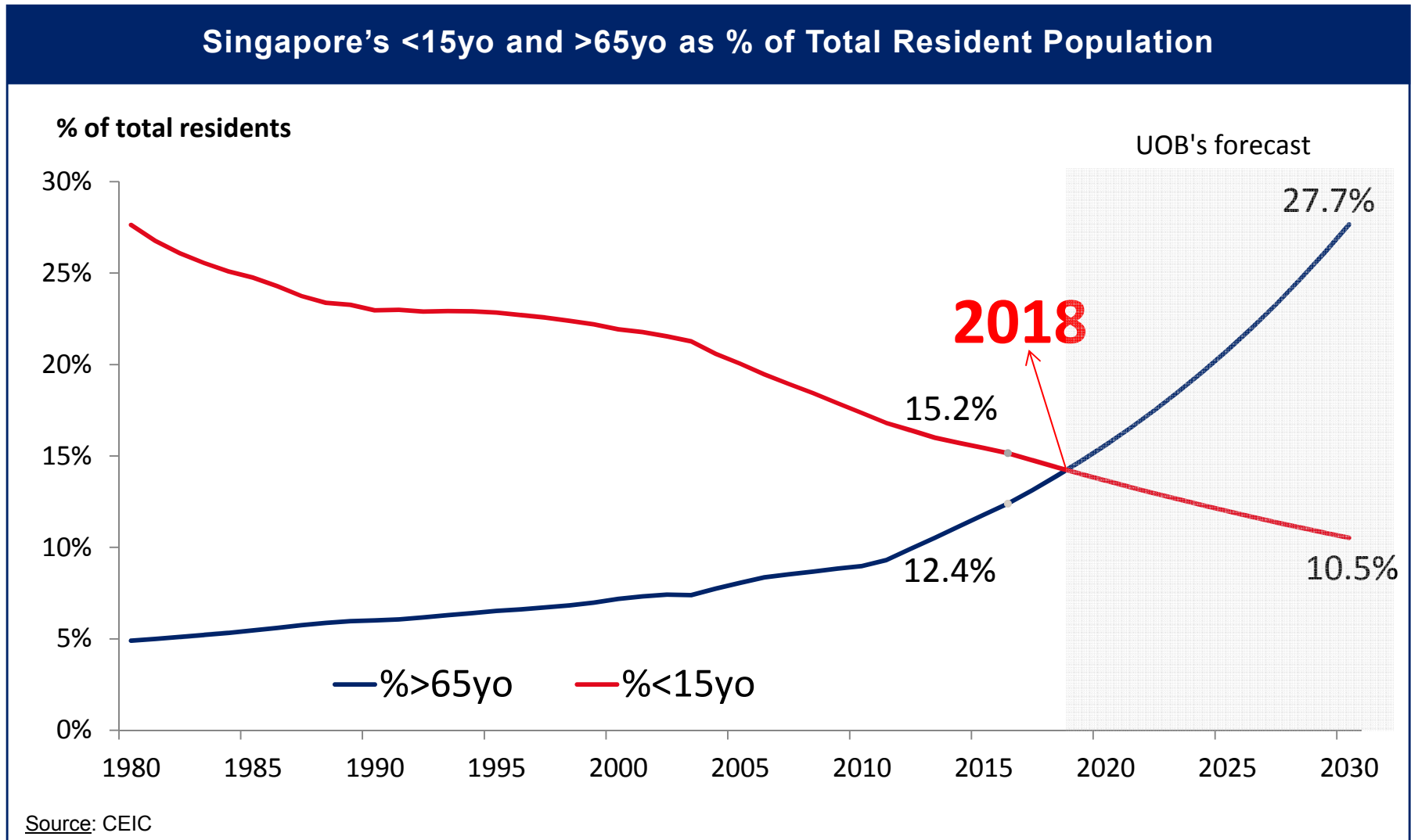
Urban development and infrastructure. Recommend strategies to enhance our infrastructure and develop sustainable urban spaces, so as to create an outstanding living environment for our people and reinforce economic advantage.

Connectivity. Study modern connectivity and flows in the future global economy and recommend how Singapore can continue to be a hub that brings value to Asia and the world.

$$Y = AL^{\beta} K^{\alpha}$$



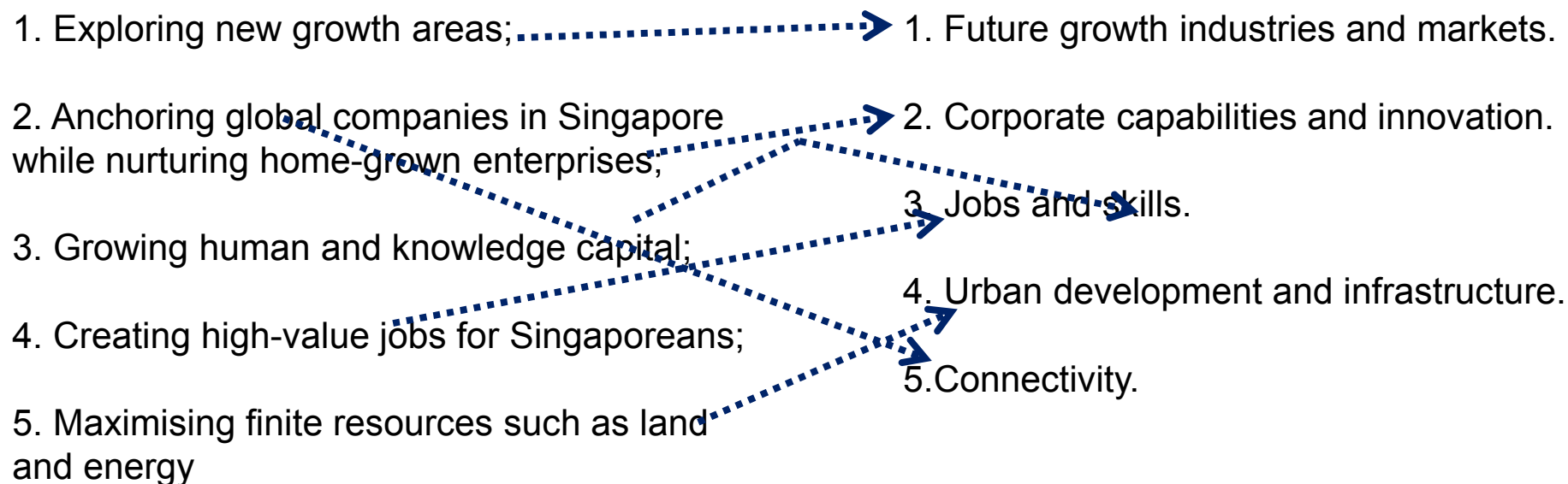
Longer Term Challenges



Comparing The 2016 Goals With 2010's

2010

2016

- 
- | | | |
|--|---|---|
| 1. Exploring new growth areas; | → | 1. Future growth industries and markets. |
| 2. Anchoring global companies in Singapore while nurturing home-grown enterprises; | → | 2. Corporate capabilities and innovation. |
| 3. Growing human and knowledge capital; | → | 3. Jobs and skills. |
| 4. Creating high-value jobs for Singaporeans; | → | 4. Urban development and infrastructure. |
| 5. Maximising finite resources such as land and energy | → | 5. Connectivity. |

$$Y = AL^{\beta} K^{\alpha}$$

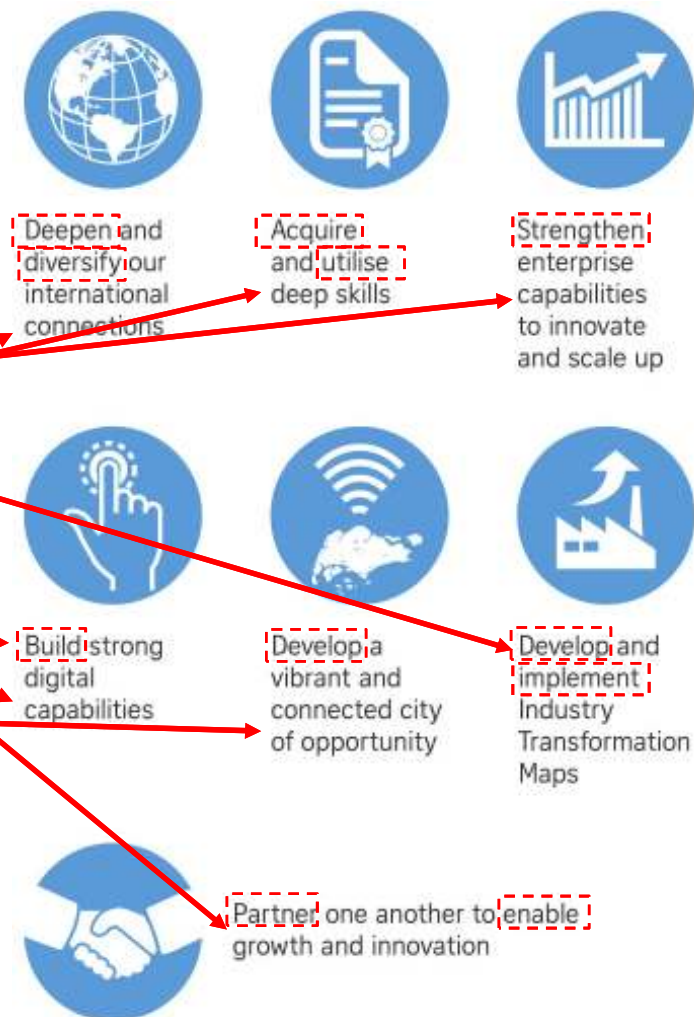
“Old Song, New Singer”

Tackling 5 Areas

Using 7 Strategies



1. Future growth industries and markets.
2. Corporate capabilities and innovation.
3. Jobs and skills.
4. Urban development and infrastructure.
5. Connectivity.



Source: COMMITTEE ON THE FUTURE ECONOMY
STRAITS TIMES GRAPHICS

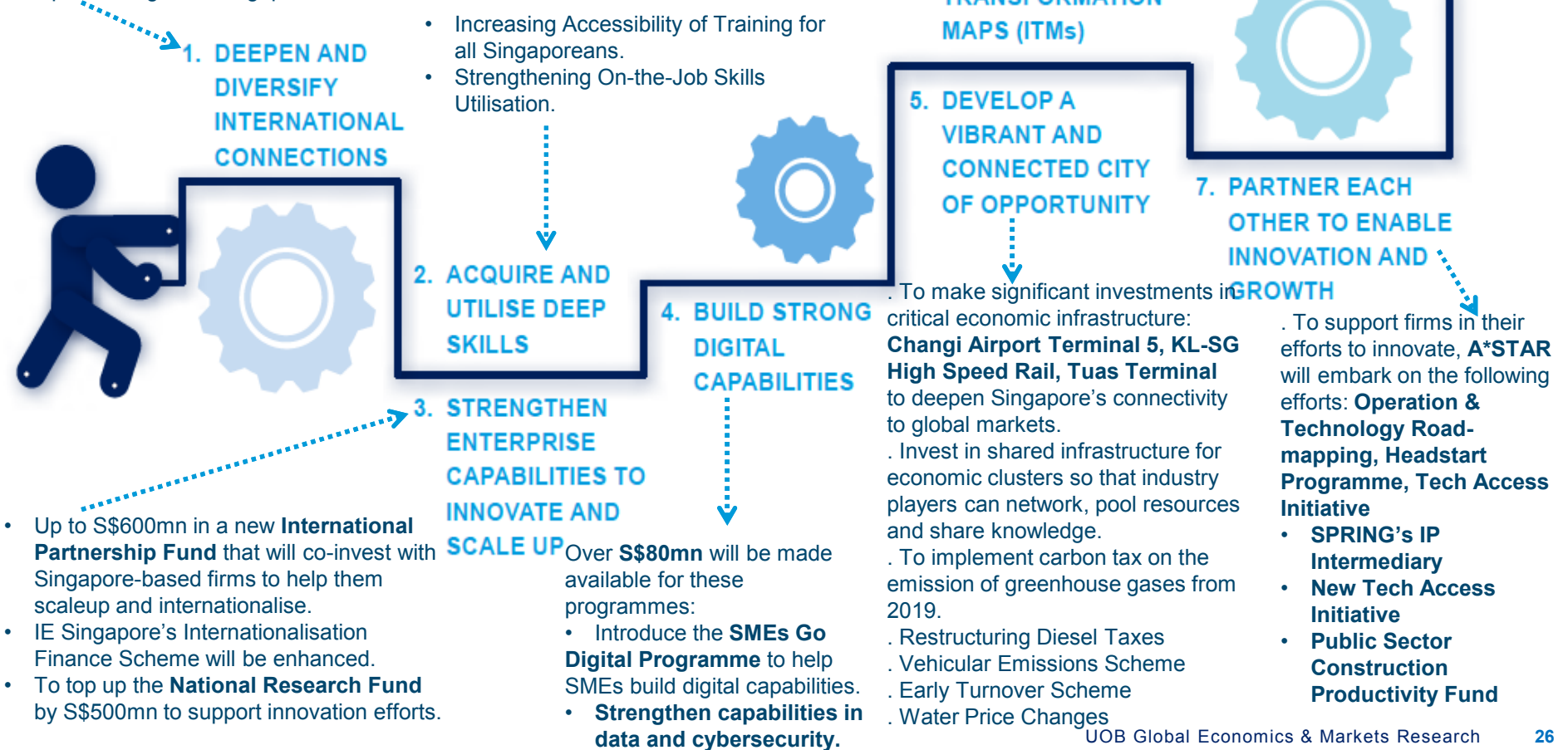
...Matched To The Initiatives Announced In Budget 2017

Over **S\$100mn** to build capabilities under the below initiatives:

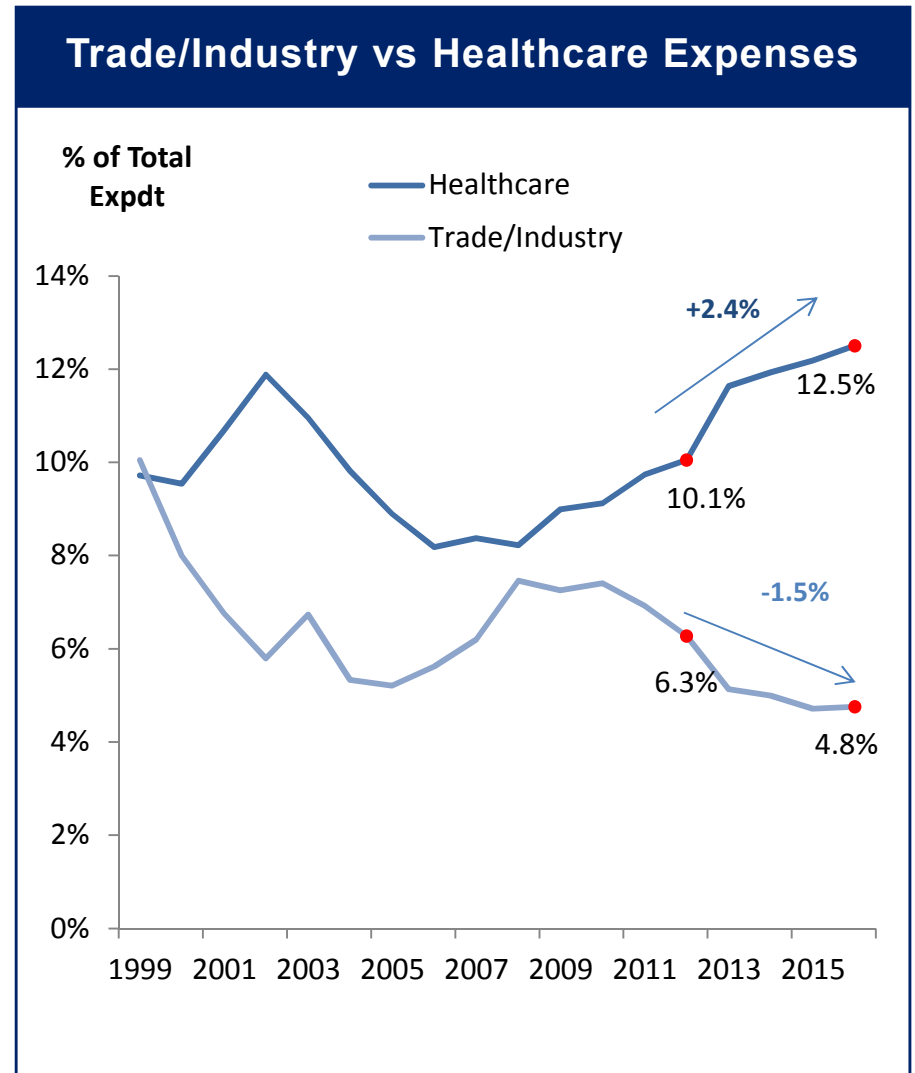
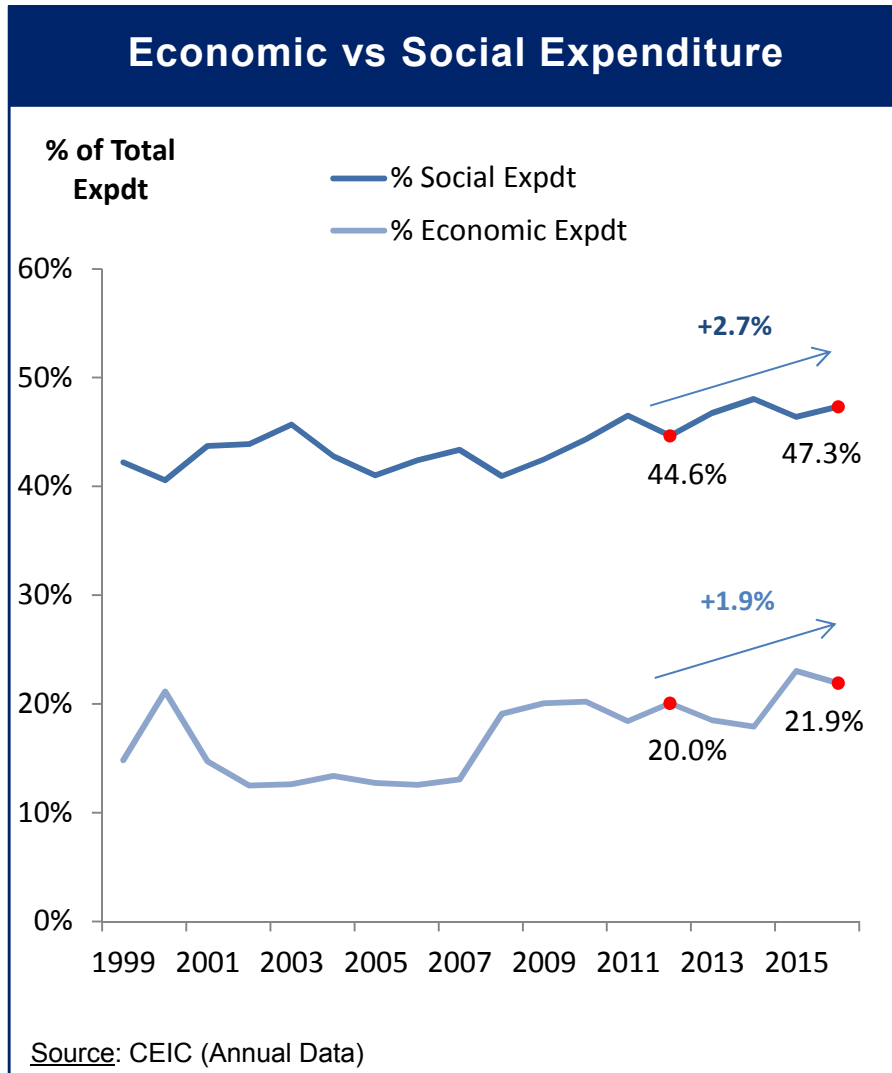
- Setting up of **Global Innovation Alliance** for Singaporeans to gain overseas experience, build networks and collaborate abroad.
Consists of 3 programmes:
 1. **Innovators Academy**
 2. **Innovation Launchpads**
 3. **Welcome Centres**
- **SkillsFuture Leadership Development Initiative** will support companies to groom Singaporean leaders.

S\$2.4bn
Set Aside Over The Next 4 Years To Implement The CFE Strategies

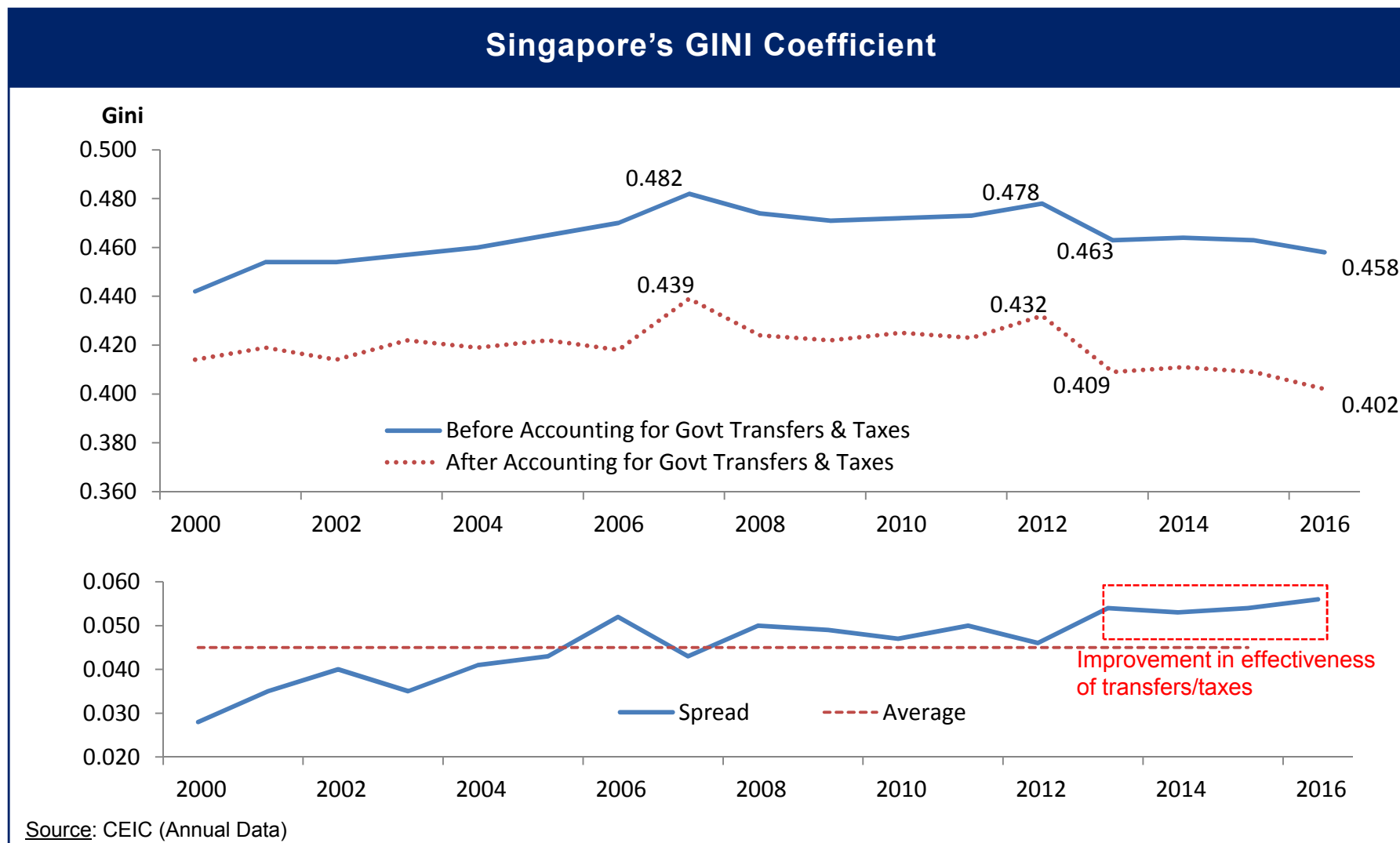
- **Industry Transformation Maps** to bring together various stakeholders to come together to transform each sector. 23 sectors identified, covering 80% of the economy .
- To top up the **National Productivity Fund** by S\$1bn to support industry transformation.



Lots More Emphasis on Social Expenditure Since 2011



Improvement in GINI Coefficient, Especially after Government Intervention



We Face New Challenges

A. The Future Beyond SG50: New World, New Challenges

A.1. Madam Speaker, I beg to discuss the financial policy of the Government for the period from 1 April 2016 to 31st March 2017.

We Have Come a Long Way

A.2. Last year, we celebrated a significant milestone. This year, we stand on the shoulders of giants.

A.3. Our first 50 years tell an inspiring story of overcoming great odds.

Our pioneers have shown us the way forward.

Investment in education, research and development, and the arts and culture have laid the foundation for our success.

Through the efforts of all Singaporeans, we have built a strong and resilient economy.

Our Gross Domestic Product (GDP) has grown steadily, and our living standards have improved significantly.

The Government has implemented a series of measures to support our economic growth and social progress.

a. The Government has increased its capital expenditure to support infrastructure development.

b. Few in our industry have not benefited from this balanced budget.

By working together, we can overcome any challenge that lies ahead.

A.18. I am confident that if we have the will, we will find the way.

A.20. **Core for us to succeed is the spirit of partnership**, where Singaporeans work together in new ways to transform our economy and strengthen our society.

A.21. We have inherited a rich heritage from our kampong days. Over the years, we have embraced new vitality, from the digital age to the green economy. Conversion to the service economy is a collective commitment.

A.22. **Going forward, we will continue to embrace change and innovation together.**

A.23. Everyone has a role, and we must work together to give strength and resilience to our nation.

A.24. **We must come together to face the challenges of the future.**

A.17. I am confident that if we have the will, we will find the way.

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A Spirit of Partnership for our New Chapter

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B. Transform and Innovate

Growing Singapore

B.1. Let me first discuss the economic outlook.

B.2. Over the past few years, we have focused on three key areas:

a. We have strengthened our financial system.

b. We have improved our infrastructure.

c. We have enhanced our human capital.

B.3. Progress has been made in all these areas.

B.4. In 2015, the economy grew by 2.9%.

B.5. I am aware that the economic environment is uncertain.

B.6. The Government will continue to support our economic growth.

B.7. The pace of global economic recovery is uneven, with the US being the most advanced, while Europe and Japan will only see modest growth.

B.8. We therefore expect externally-oriented sectors such as manufacturing to continue to face subdued demand.

B.9. The extended downturn in oil and other commodity prices is affecting commodity-related activities, particularly the marine and offshore sector.

B.10. Weak global demand in electronics will spill over to related sectors such as precision engineering.

B.11. Similarly, prospects in the labour market are mixed. Overall, redundancies increased in 2015 as global demand slowed and

B.12. With the sector prospects varying across countries, some are becoming more competitive and gaining market share, while others are seeking to relocate to cheaper destinations.

B.13. For our part, we will continue to support our economic growth.

B.14. I am aware that the economic environment is uncertain.

B.15. All these translate into higher spending needs. Our expenditures have grown to almost two and a half times of what

im said: "Whilst independence has... of action we also acquire new

dimension... these

With a ti... median i... 2.9%⁷ pe... producti... Whi... playear... due to th... growth t... years⁹. V

B.7. The pace of global economic recovery is uneven, with the US being the most advanced, while Europe and Japan will only see modest growth aided by monetary stimulus. Closer to home, China is going through a transition towards a more sustainable growth path. It is a complex transition and any short-term setbacks may create volatility in the financial markets.

B.8. We therefore expect externally-oriented sectors such as manufacturing to continue to face subdued demand. The extended downturn in oil and other commodity prices is affecting commodity-related activities, particularly the marine and offshore sector. Weak global demand in electronics will spill over to related sectors such as precision engineering.

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Too Much Information; Too Little Time!

Budget 2017



Moving Forward Together

	Budget 2017	Pages	Number	
Social	A Caring and Inclusive Society	32 to 42	11	2016=34%
			(26%)	
Economy	An Innovative and Connected Economy			
	Managing the Transition	6 to 10	5	18 (43%) 2016=66%
	The Future Economy	11	1	
	*Strengthening Enterprises Capabilities	12 to 15	4	
	*Deepening People's Capabilities	16 to 19	4	
	*Partnerships for Shared Success	20 to 23	4	
City	A Quality Living Environment	24 to 31	8	(19%)
Prudence	A Sustainable Fiscal System	43 to 47	5	(12%)

Budget 2017



Moving Forward Together

		Budget 2017	Pages	Number	
Social	}	A Caring and Inclusive Society	32 to 42	11	
				(26%)	
		An Innovative and Connected Economy			
Short-Term	}	Managing the Transition	6 to 10	5	(28%)
		The Future Economy	11	1	2016=16%
Long-Term	}	*Strengthening Enterprises Capabilities	12 to 15	4	13 (72%) 2016=84%
		*Deepening People's Capabilities	16 to 19	4	
		*Partnerships for Shared Success	20 to 23	4	
City		A Quality Living Environment	24 to 31	8	(19%)
Prudence		A Sustainable Fiscal System	43 to 47	5	(12%)

Doing It The Hard Way: Measuring Word by Word

Top Words Mentioned In 2016

Words	2016	2017	2017-16
support	147	71	-76
transform	66	9	-57
industries	58	26	-32
innovate	54	38	-16
work	52	24	-28
develop	51	35	-16
sector	47	40	-7
build	44	32	-12
firm	44	30	-14
senior	43	1	-42
help	42	51	9
together	42	23	-19
people	40	20	-20
business	39	24	-15
first	38	16	-22
provide	37	29	-8
need	36	37	1
worker	35	26	-9
receive	35	14	-21
scheme	34	29	-5
budget	33	29	-4

Top Words Mentioned In 2017

Words	2016	2017	2017-16
support	147	71	-76
increase	27	58	31
help	42	51	9
tax	24	50	26
fund	27	41	14
sector	47	40	-7
innovate	54	38	-16
need	36	37	1
develop	51	35	-16
measure	28	34	6
capable	12	33	21
build	44	32	-12
water	0	31	31
firm	44	30	-14
enhance	18	30	12
communities	18	30	12
rebate	12	30	18
provide	37	29	-8
scheme	34	29	-5
budget	33	29	-4
economies	33	29	-4

Source: MOF, UOB Data Management Office

As % of All Words

Top Words Mentioned In 2016

Words	2016	2017	2017-16
support	2.06%	1.26%	-38.9%
transform	0.93%	0.16%	-82.8%
industries	0.81%	0.46%	-43.3%
innovate	0.76%	0.67%	-11.0%
work	0.73%	0.43%	-41.6%
develop	0.72%	0.62%	-13.2%
sector	0.66%	0.71%	7.6%
build	0.62%	0.57%	-8.0%
firm	0.62%	0.53%	-13.8%
senior	0.60%	0.02%	-97.1%
help	0.59%	0.90%	53.6%
together	0.59%	0.41%	-30.7%
people	0.56%	0.35%	-36.8%
business	0.55%	0.43%	-22.2%
first	0.53%	0.28%	-46.7%
provide	0.52%	0.51%	-0.9%
need	0.50%	0.66%	30.0%
worker	0.49%	0.46%	-6.0%
receive	0.49%	0.25%	-49.4%
scheme	0.48%	0.51%	7.9%
budget	0.46%	0.51%	11.1%

Top Words Mentioned In 2017

Words	2016	2017	2017-16
support	2.06%	1.26%	-38.9%
increase	0.38%	1.03%	171.7%
help	0.59%	0.90%	53.6%
tax	0.34%	0.89%	163.5%
fund	0.38%	0.73%	92.1%
sector	0.66%	0.71%	7.6%
innovate	0.76%	0.67%	-11.0%
need	0.50%	0.66%	30.0%
develop	0.72%	0.62%	-13.2%
measure	0.39%	0.60%	53.6%
capable	0.17%	0.59%	247.8%
build	0.62%	0.57%	-8.0%
water	0.00%	0.55%	∞
firm	0.62%	0.53%	-13.8%
enhance	0.25%	0.53%	110.8%
communities	0.25%	0.53%	110.8%
rebate	0.17%	0.53%	216.2%
provide	0.52%	0.51%	-0.9%
scheme	0.48%	0.51%	7.9%
budget	0.46%	0.51%	11.1%
economies	0.46%	0.51%	11.1%

Source: MOF, UOB Data Management Office

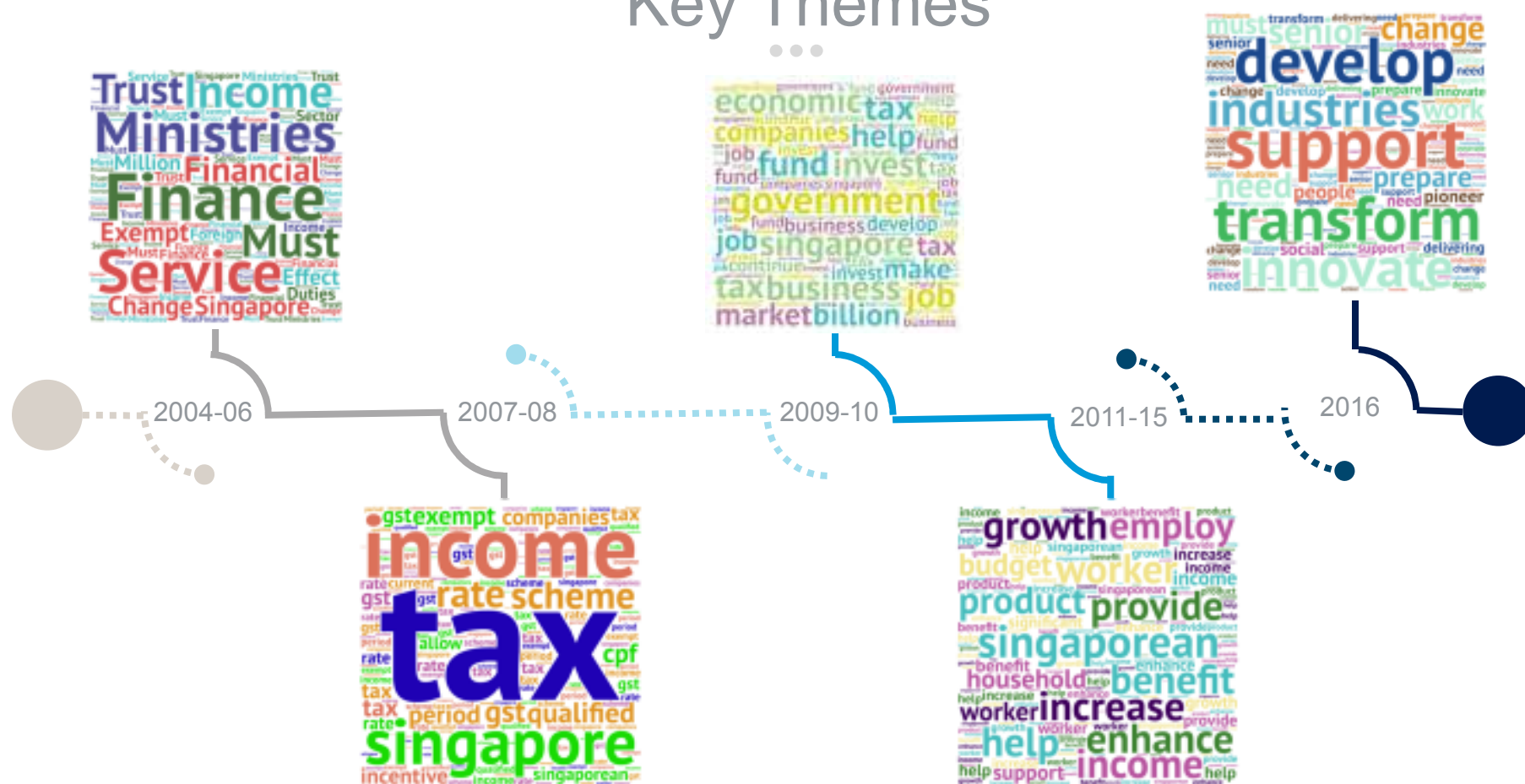
Topic Modelling Past Budgets Using Latent Dirichlet Allocation Technique

Governance 2004-05	Taxation 2006-08	Economy 2009-10	Citizens 2011-15	Innovation 2016-17
Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
Finance	Tax	Govern	Singaporean	Support
Ministries	Income	Businesses	Worker	Innovation
Service	Qualify	Tax	Increase	Transform
Trust	Scheme	Invest	Provide	Firm
Tax	Companies	Help	Help	Industries
Exempt	Rate	Job	Income	Develop
Worker	Finance	Economic	Employment	Work
Opportunities	Allow	Companies	Enhance	Programme
Operate	Period	Fund	Benefit	Prepare
Income	Exempt	Economies	Product	Build
Change	CPF	Market	Scheme	Sector
Effect	GST	Sector	Growth	People
Individuals	Treatment	Well	Budget	Together
Attract	Employ	Grow	Foreign	Deliveries
Competitors	Incentives	Develop	Support	Technology

Utilising Machine Learning To Sieve Out Key Themes From Singapore's Annual Budgets

MACHINE LEARNING

Key Themes



Topic Modelling on Previous Budgets Using The Latent Dirichlet Allocation Method

1

QUESTION

“Can we uncover key themes from past budget statements?”

2

CHALLENGE

Understand and organize large collections of unstructured text bodies in a short time



14 Years of History



850 pages

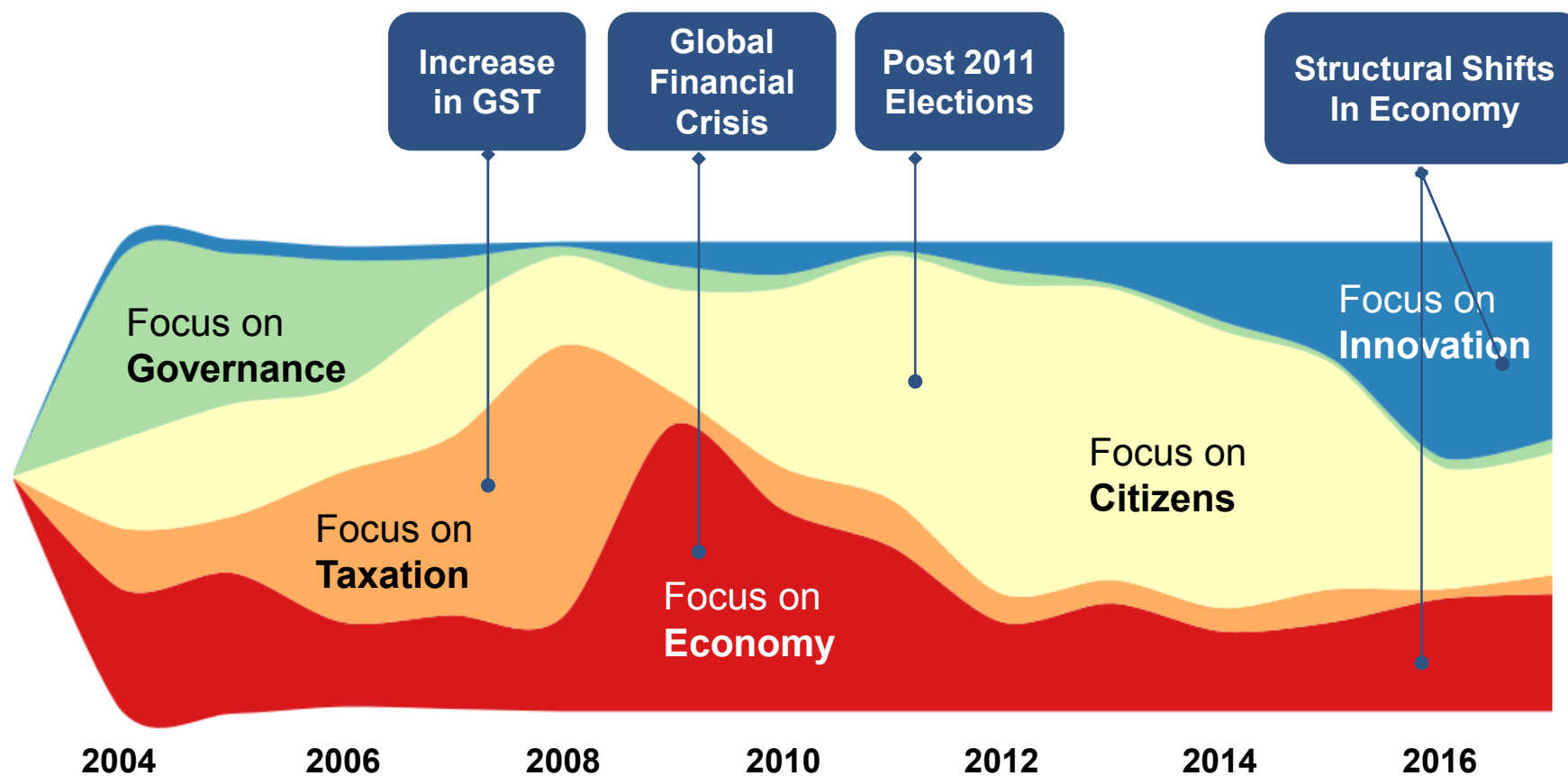


1 Million characters

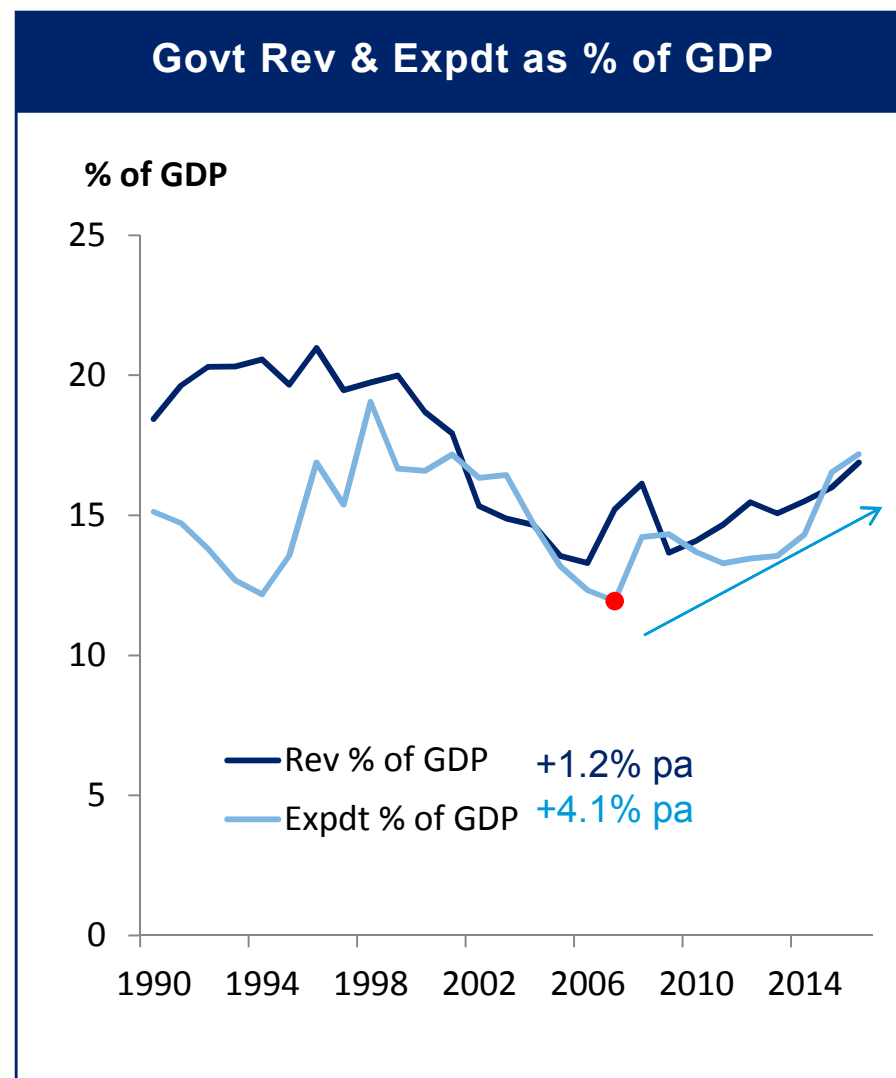
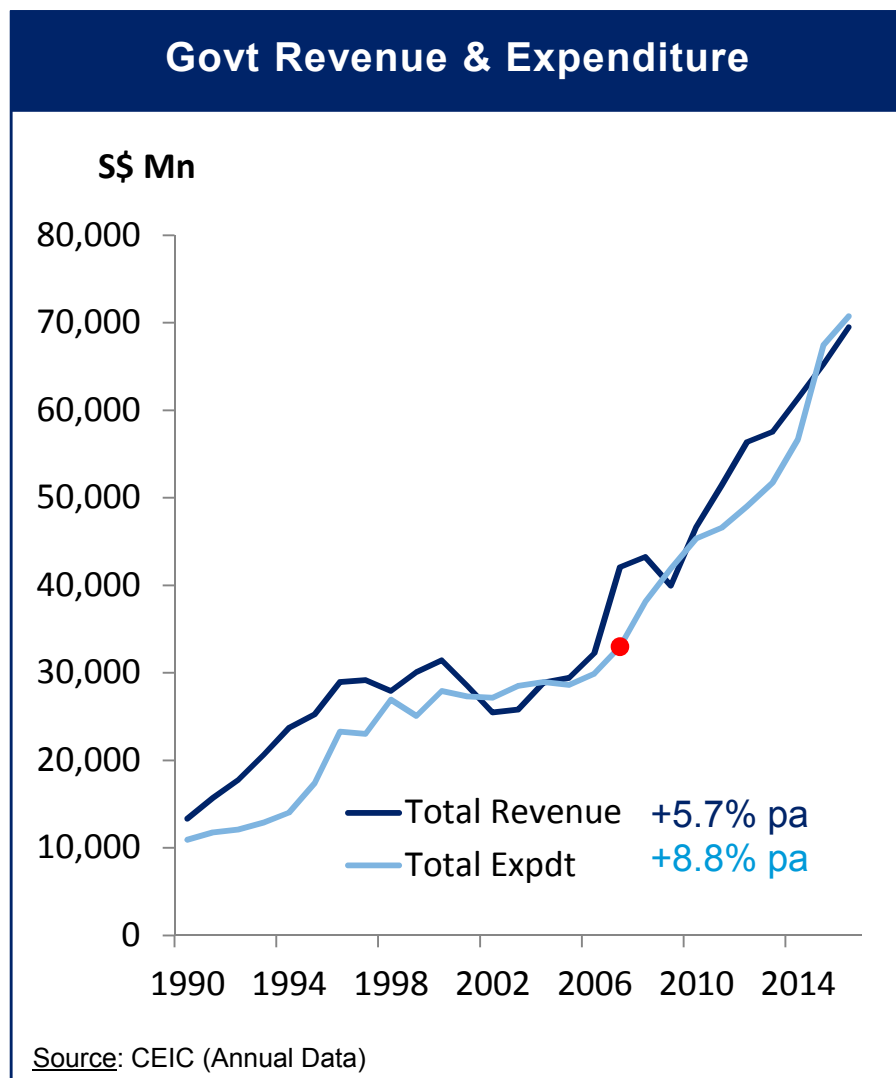


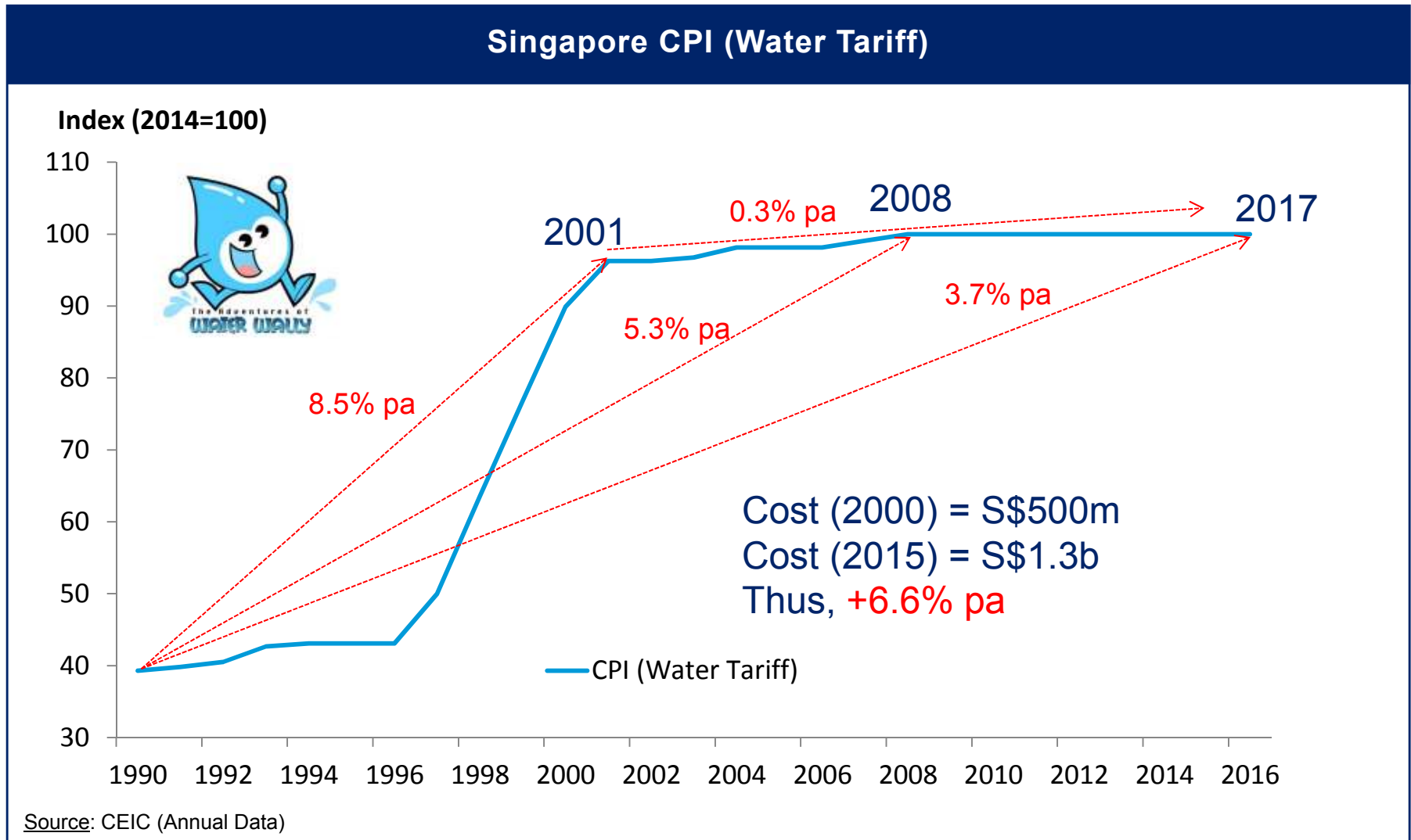
Uncovered within 1 day

Results

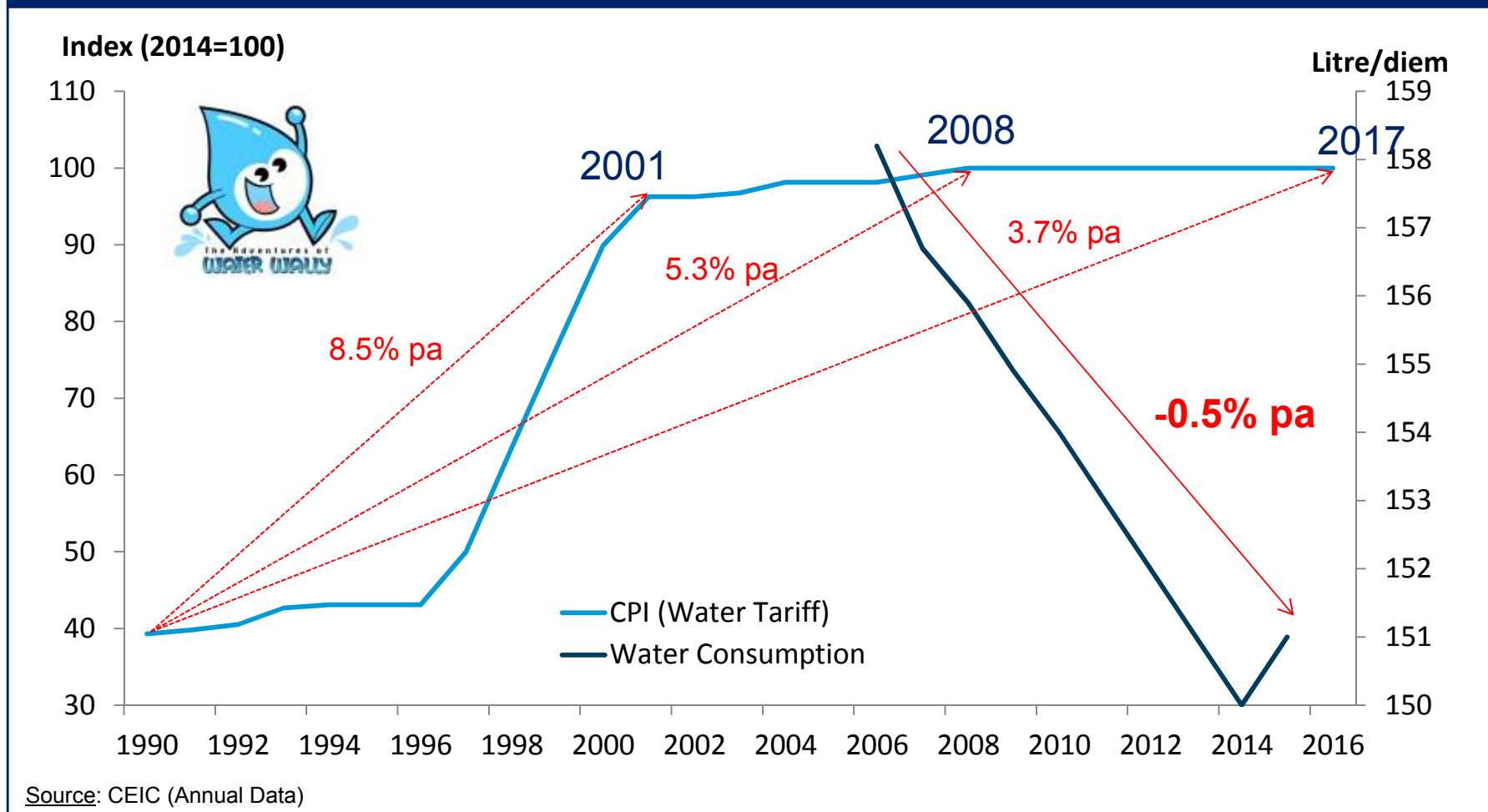


Expenditure Is Really Rising Very Quickly





Singapore CPI (Water Tariff)



Balancing The Budget

S\$ mn	FY2016	FY2016	FY2017	FY2017	% chg
Operating Revenue	68,440	68,670	69,450	70,926	1.1%
Total Expenditure	73,430	71,390	75,070	74,095	5.2%
Operating Expenditure	54,430	52,680	56,300	54,473	6.9%
Development Expenditure	19,000	18,710	18,770	19,622	0.3%
Primary Budget Balance**	-4,990	-2,720	-5,620	-3,169	106.6%
Less: Special Transfers	6,270	6,470	6,580	5,362	1.7%
Add: NIR Contribution	14,700	14,370	14,110	15,696	-1.8%
Overall Budget Balance	3,440	5,180	1,910	7,164	-63.1%
% of GDP	0.85	1.30	0.40	1.70	
Source: Ministry of Finance					
* Figures may not add up due to rounding					
** Surplus (Deficit) before Special Transfers and Net Investment Income (NII) Contribution					

Question & Answer Session

Contact Details

Francis Tan

UOB Global Economics & Markets Research

francis.tantt@uobgroup.com



About The Speaker

Francis is an Asian economist with United Overseas Bank's Global Economics & Markets Research team with special focus on research on ASEAN economies. He provides regular economics commentary on TV and is frequently quoted in the media. Before joining UOB in 2012, Francis was an investment strategist at Phillip Capital where he used macroeconomics, business cycle theories, market timing and technical analyses to develop a systematic top-down investment approach for discretionary portfolios. Prior to that, Francis served as an Investment Manager in the wealth management arm of the Royal Bank of Scotland. His career also included stints as an economist at the Ministry of Trade and Industry and the Singapore Tourism Board, where he specialised in Tourism Economics.

Francis obtained the Bachelor of Social Science (Honours) in Economics in 2002 and the Master of Social Science in Applied Economics in 2003 from the National University of Singapore. Continuing his academic interests in the field of applied economics, Francis most recently contributed a chapter titled "Tourism Demand in Singapore: Estimating Neighbourhood Effects" in the Handbook of Tourism Economics published in 2013, and had published a paper titled "Growth and Environmental Quality in Singapore: Is There Any Trade-off?" in the "Ecological Indicators" journal in 2014.

Thank You

