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Asia
Singapore

Economics

Special Report

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Singapore's contrasting structural strength and macro weakness

- Singapore is at a challenging juncture. Having performed impressively over the decades, achieving world-leading income, human capital, and infrastructure, the city-state's economic performance has wavered in the last five years. The step down in growth can be explained by a mix of cyclical and structural forces. While Singapore's heavily export-oriented economy struggles with stagnant global trade, at home, it is dealing with a tight and aging labor force, declining productivity, and heavily leveraged corporates and households.
- Responding to a challenging global economic environment and emerging domestic labor constraints, Singapore in 2010 embarked on a multi-year economic restructuring program to boost productivity. Efforts to re-structure the economy have yet to bear fruit though. Labor productivity in the city state has been lackluster across sectors, averaging only by 0.4%yoy since 2011 against 2.1% in the preceding decade.
- The host of external and domestic headwinds affecting Singapore's small open economy with limited resources underscores the urgency to pursue structural reforms. Singapore leads the emerging markets in structural performance, but there is still room to improve productivity, foster innovation and creativity. Labor intensive businesses have to make way for more automation; while skills need to be upgraded for workers to contribute fruitfully to an evolving business environment. Singapore also needs to stay at the forefront of initiatives to foster regional integration and market access that would help its businesses to grow on the back of ASEAN demand, in particular.
- In addition to structural measures, macroeconomic policies may have additional room to play. Additional fiscal measures to improve coverage of health, pension, and education, and improve affordability could ease the insecurity of the population. Monetary policy may need to be tweaked to ensure a positive growth-interest differential that is essential to ensure household debt sustainability.

DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MCI (P) 057/04/2016.

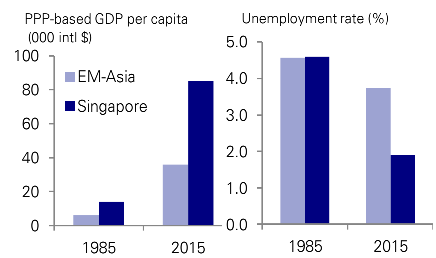
Sustained structural strength, yet lingering macroeconomic weakness

Impressive track record, but no room for complacency

Singapore's economic transformation in less than half a century is impressive. From a low-income nation troubled with high unemployment, Singapore has transformed itself to become a high-income nation with nearly full employment as it is today.

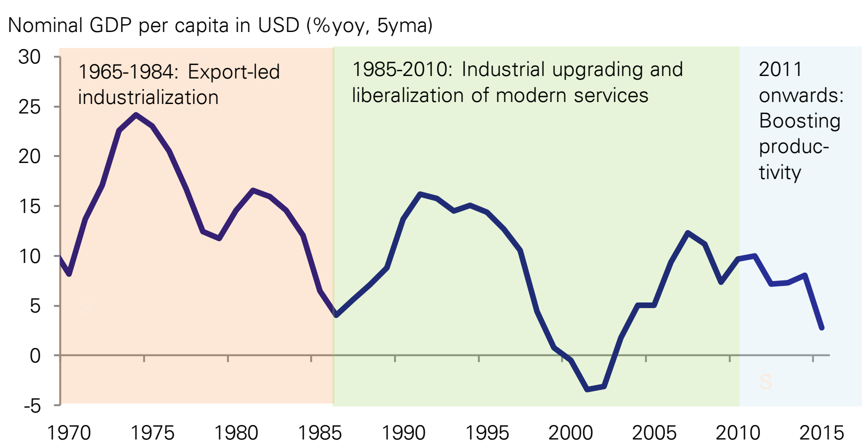
That remarkable progress can be attributed to two phases of economic reforms. Under the program of export-led industrialization, initiated following Singapore's separation from Malaysia in 1965 and ran through 1984, Singapore's income per capita rose steeply by an average of 15% per annum. While it moderated thereafter, per-capita income growth nonetheless remained robust at nearly 8% per annum from 1985 through 2010 as the city-state moved to upgrade its industrial base and modernize the services sector, the latter paving the way for a two-legged growth engine alongside manufacturing. This outstanding economic performance which was sustained for over four decades has facilitated major progress in infrastructure, education, and market development. In turn, Singapore today ranks high in overall human development, leading in Asia and 11th out of 188 countries according to the United Nations' 2014 ranking, particularly in terms of citizens' life expectancy, access to knowledge, and standard of living.

Outstanding economic performance



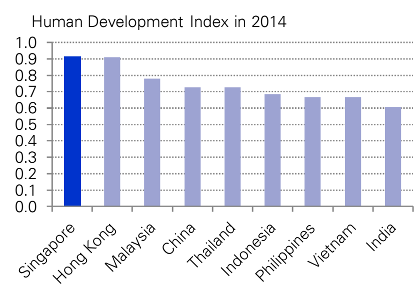
Source: Haver Analytics and Deutsche Bank

Singapore's three phases of economic reforms



Source: CEIC, MAS, and Deutsche Bank

Leading in human development

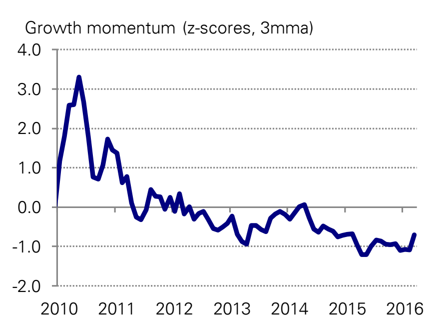


Source: UNDP and Deutsche Bank

Macro slippage in the last five years

The past five years, however, have seen a steady deceleration in overall output and per-capita incomes. While evident across the region, Singapore's economic slowdown is one of the most severe. The strong rebound in 2010 following the global financial crisis proved to be short-lived as starting in 2012, growth momentum increasingly slipped nearly 1std below its long-run trend. In our view, the step down in growth can be explained by a mix of cyclical and structural forces. While Singapore's heavily export-oriented economy struggles with stagnant global trade, at home, it is dealing with a tight and aging labor force, heavily leveraged corporates and households, and declining productivity.

Increasingly losing momentum

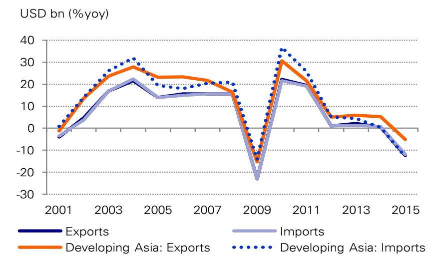


Weighted average of the growth rates of retail sales, credit, industrial production, non-oil imports, residential transaction, PMI, and employment. Weights are derived from an OLS regression of real GDP growth against said variables.
Source: CEIC and Deutsche Bank

Trade stagnation

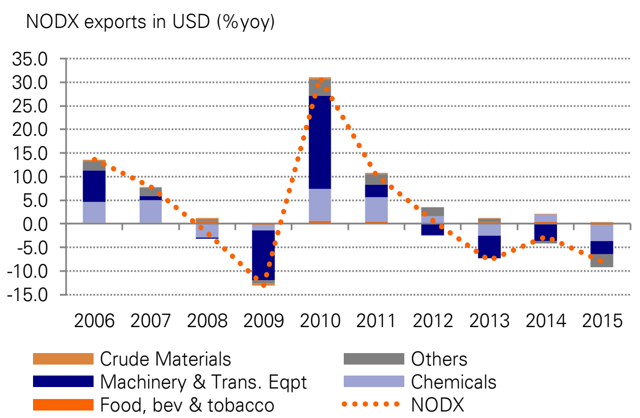
The chronic weakness in global exports has cut down Singapore's domestic merchandise export earnings and volumes in the last three years (since 2012 for export volumes). While the collapse in crude oil prices (oil exports accounting for over 30% of domestically-sourced exports) can largely explain the drop in earnings, this bleak outturn holds true for non-oil exports too, particularly precision engineering. By destination, the decline in Singapore's exports growth is broad-based, led by the deceleration in demand from China (accounting for about 20% of total NODX inclusive Hong Kong), the EU (10%), and the US (7%). Against this sustained underperformance of the external sector (goods and services), the contribution of the sector to GDP has gradually fallen from over 200% in 2003-08 to 177% in 2015.

Protracted weakness in global trade



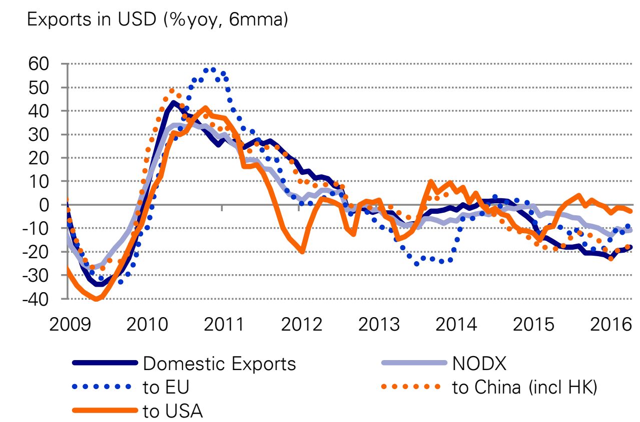
Source: Haver Analytics and Deutsche Bank

NODX weighed by tepid precision engineering demand



Source: CEIC and Deutsche Bank

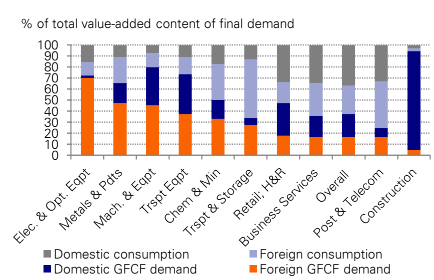
Unlikely to see a major turnaround in exports soon



Source: CEIC and Deutsche Bank

While the contraction of exports to the EU and China appears to have bottomed in recent months and oil prices have recovered a tad, we believe it remains challenging to envision a major turnaround in Asia's, including Singapore's, exports in the coming months. For one, manufacturing activity in the US and Eurozone further weakened, according to the PMI survey data for May. And while China's has shown a slight improvement, the continued rebalancing of the Chinese economy away from the investments towards a consumption-driven growth is likely to remain a drag on Singapore's exports, where key components like precision engineering (machinery & equipment, electrical & optical equipment, metal & metal products) are more vulnerable to the deceleration in global investment activity.

Precision engineering vulnerable to global investment growth slowdown



Source: OECD and Deutsche Bank

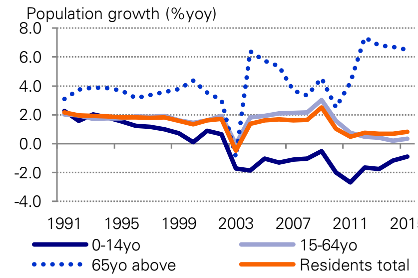
Moreover, the protracted stagnation of global exports may be structural in nature. One factor that has been hindering free trade could be the rise in trade protectionism. The WTO has raised concerns of the increase in the stock of trade-restrictive measures recorded since 2008. According to WTO, as of October 2015, only 25% of the 2,557 measures have been eliminated, leaving the stock of restrictive measures 17% higher than a year ago. Insourcing trends, which could lead to a slower pace of growth of global supply chains (GSCs) and adversely affect Asia's dependence on the US and China for exports, could also be another factor. Reflecting shrinking GSCs, the International Labor Organization notes that the share of employment in GSCs among emerging economies has declined past the global financial crisis. These trends are unlikely to drastically change soon and thus are expected to weigh on the slight improvement of external demand in the coming months.

Aging population and tight labor supply

The city state is facing a rapidly aging population and declining resident population growth rate. The number of residents above 65 years old has accelerated to 7% per year since 2012 from less than 4% in the previous decade. Meanwhile, resident population growth has gradually fallen from 1.8% in the 1990s to below 1% per annum since 2011.

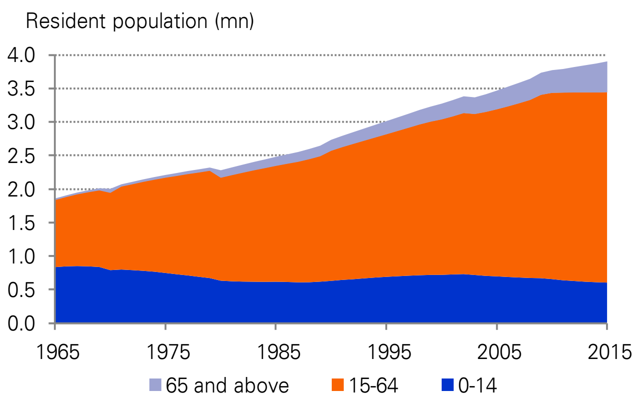
Moreover, labor force growth has been muted. The resident working age population (15-64 years old) barely increased in the past five years (up 0.4%yoy against 2.2% in 2006-10, while its outlook is bleak given low birth rates and the declining share of those below 15 years old in the population. The growth of the country's workforce can also no longer be counted upon on the influx of foreign labor, which already accounts for over a third of the total workforce.

Unfavorable demographics



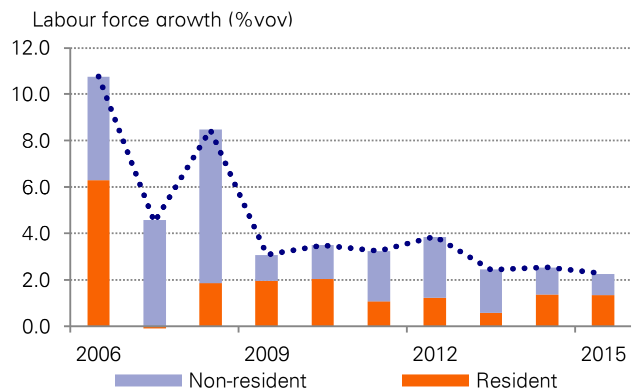
Source: CEIC and Deutsche Bank

Rapidly aging population, shrinking pool of youngsters



Source: Deutsche Bank

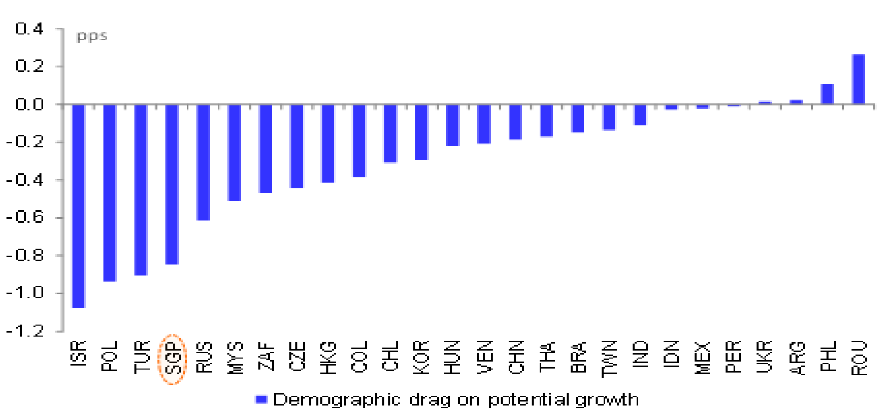
Foreign workers driving labour force growth



Source: CEIC and Deutsche Bank

Inadequate supply of labor will remain a drag to Singapore's capacity to produce, especially if not countered by sufficient productivity gains. Our estimates show that unfavorable demographics, marked by a rising dependency ratio, could cut Singapore's potential growth by nearly 1%-pt, holding other factors constant. Moreover, Singapore's rapidly aging population could undermine the city-state's fiscal position and in turn, constrain the government's ability to safeguard the economy from adverse shocks.

Demographics stands to cut down Singapore's growth prospects

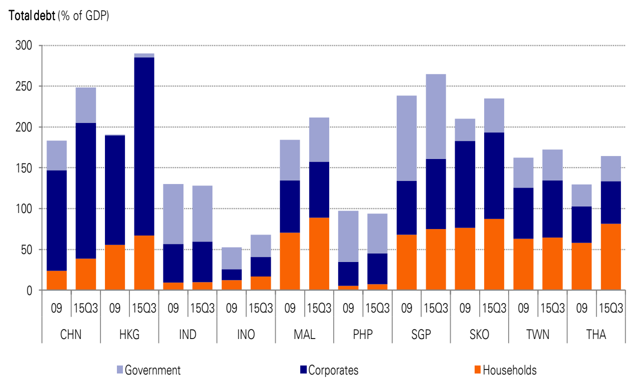


Source: Deutsche Bank

Rising leverage

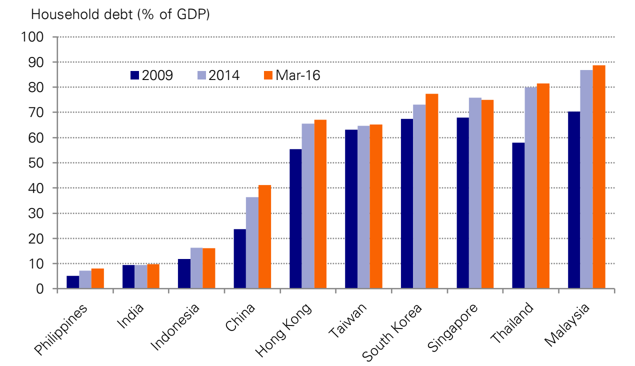
Alongside most EM-Asian economies, Singapore's debt burden has risen since the Global Financial Crisis, partly driven by the surge in capital inflows from loose monetary policies in the advanced economies. From less than 240% of GDP in 2009, the total debt burden has progressively increased to 265% in 2015, already one of the highest in the region. Singapore's debt pressure points stem from elevated corporate and household leverage. Public sector debt, on the other hand, is backed by assets. The Singapore government does not borrow to fund its annual budgets, but rather to develop the city-state's debt market and to meet the investment needs of the Central Provident Fund.

Nearly a region-wide increase in debt burdens



Source: Asianbondsonline, CEIC, Haver Analytics, and Deutsche Bank.

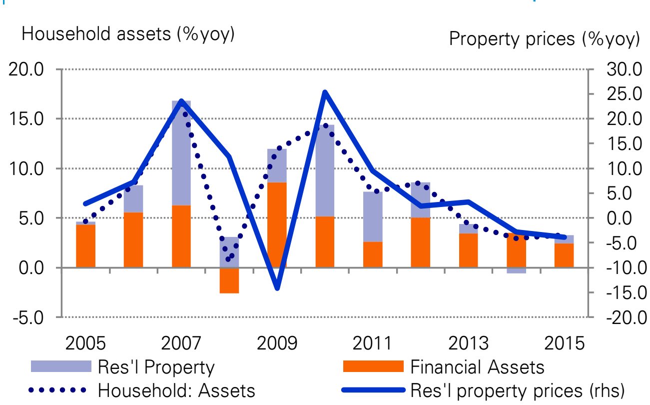
Singapore's household debt is one of the most onerous



Source: CEIC and Deutsche Bank

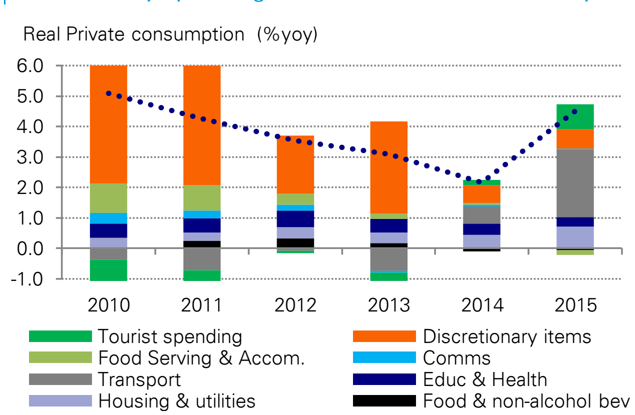
While debt servicing capacity also remains high for households and corporates, the elevated levels of private sector leverage nonetheless call for caution. A weaker SGD and higher interest rates could increase the debt burden, which in turn could dampen the appetite for capital expansion among firms and spending among consumers. The heavy debt burden also stands to make the economy more vulnerable to adverse income shocks, such as a slowdown in economic activity which could lead to retrenchments or a drop in property prices in which over 45% of household wealth is anchored upon.

Household wealth has decelerated with house prices



Source: CEIC and Deutsche Bank

Discretionary spending has slowed down in recent years



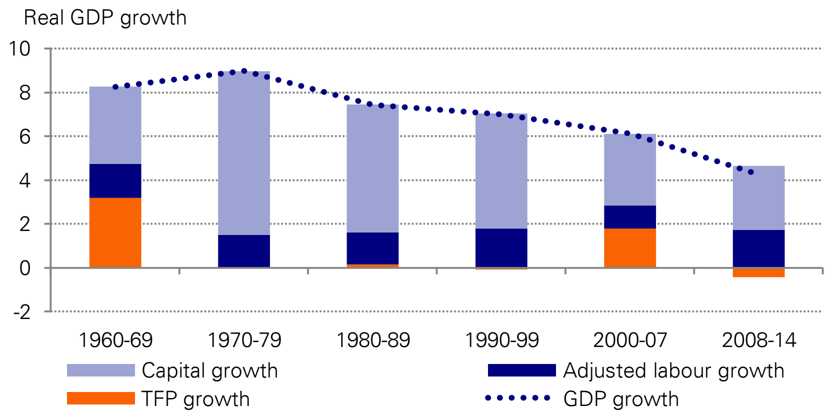
Discretionary items include alcoholic beverages & tobacco, clothing & footwear, furnishings, household equipment & maintenance, recreation & culture, misc. g&s, residents' expenditures abroad.
Source: CEIC and Deutsche Bank

Private consumption in Singapore, for instance, has decelerated since the one-off rebound in 2010. This slowdown in spending growth, driven by weaker spending on discretionary items, may be due to increased cautiousness among residents amid an uncertain economic environment.

Drive to boost productivity

Responding to a challenging global economic environment and emerging domestic labor constraints, Singapore in 2010 embarked on a multi-year economic restructuring program to boost productivity, in what can be considered the third round of reforms in Singapore's economic history. From the labor and capital-intensive growth model of previous years, Singapore is hoping to shift towards a more productivity-driven growth framework within the next decade or so.

Singapore is hoping to transition from an input-intensive towards a productivity-driven growth model



TFP = total factor productivity
Source: Deutsche Bank

The government's plan is to raise productivity growth to 2-3% per year in the next decade from the 1.8% annual average in 2000-10. This is expected to accordingly double the contribution of productivity to two-thirds of economic growth, and to facilitate an annual GDP growth rate of 3-5% in the same period. In line with this goal, a slew of measures has been introduced in recent years to reduce reliance on foreign workers, encourage firms to upgrade business operations and champion innovation, and upgrade resident workers' skills and productivity. According to the annual budget, aside from tax incentives and a transition support package to firms and industries, the government has gradually increased its allocation towards enhancing productivity from SGD2bn in the National Productivity Fund in 2011 (or 0.6% of GDP) to SGD3.5bn in 2015 (0.9% of GDP) and topping up with the SGD4.5bn Industry Transformation Programme in 2016 (nearly 2.0% of GDP in total).

Singapore's economic restructuring efforts have yet to bear fruit though. Labor productivity in the city state has instead been lackluster across sectors, averaging only by 0.4%yoy since 2011 against 2.1% in the preceding decade.

A study by the Ministry of Industry cites that overall labor productivity in Singapore has been weighed down by a shift in employment towards less productive sectors such as food and beverage services and construction and away from relatively more productive sectors such as transportation and storage. The increase in employment share of domestically-oriented sectors that are less productive may be attributed to increased labor demand arising from the government's push to ramp-up building and infrastructure works in recent years, relatively lower barriers to entry partly driven by government incentives tailored towards older workers, and an aging population that is driving the growth of healthcare and social services sectors.

Poor productivity outturns of late

Source: CEIC and Deutsche Bank

Structural reforms

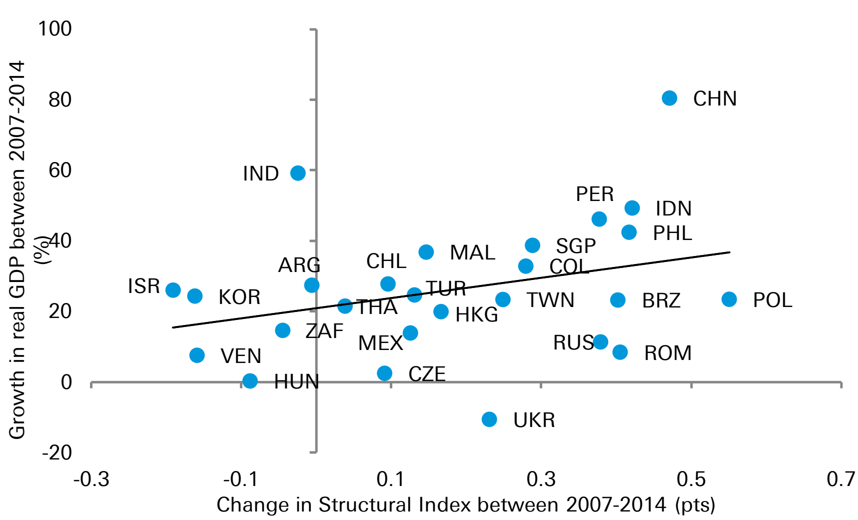
Boosting productivity remains the key to sustain growth in the long run as the rest of the inputs – labor and capital – face diminishing marginal returns. Productivity gains could translate to higher real wages, which if sustained, could bring about significant improvements in living conditions. The OECD, for instance, has stressed that boosting productivity is key for countries to close the income gap domestically and for developing economies with the advanced economies.

But Singapore's push for structural reforms, which have attendant near-term costs, is happening when the economy is facing a host of external and domestic headwinds. Singapore's increased trade and financial linkages with China over the past decade implies that China's ongoing economic re-structuring would continue to challenge the city-state's growth prospects. The ongoing trade stagnation could also mean that Singapore's export dividend from a recovering US economy may be limited, and not sufficient to counter the drag from rising rates amid heavily leveraged corporates and households.

As such, it may take longer than envisioned by policymakers (i.e. well beyond 2020) for Singapore to reap the benefits of this economic transition, in our view. We surmise that the mix of cyclical and structural forces that have been a drag to the economy, which are likely to remain so going forward, implies that Singapore will have to resign to muted growth for a couple more years.

Nonetheless, the presence of these headwinds affecting Singapore's small open economy with limited resources very well underscores the urgency to pursue structural reforms. Cross-country data show a positive relationship between structural improvements and income per capita growth. And while Singapore leads EM in structural improvements, it does have more room to improve, for instance, in providing access to loans for businesses and raising venture capital availability, browsing from the data compiled by the World Economic Forum.

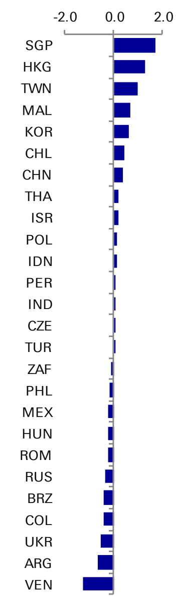
Positive relationship between income growth and structural improvements



Source: Deutsche Bank

Singapore leads EM in structural performance (2014 data)

	Institutional quality	Infrastructure	Education	Financial market	Economic openness	Goods market	State intervention	Labour market	Overall
SGP	1.69	2.75	2.90	1.67	1.80	1.91	0.82	0.56	1.76
HKG	1.61	2.90	1.61	1.78	-0.07	1.48	1.03	0.67	1.37
TWN	1.12	2.00	2.17	0.45	-0.31	1.35	0.89	0.55	1.03
MAL	0.42	1.62	1.25	1.36	-0.33	1.65	0.31	0.54	0.85
KOR	0.76	1.91	1.67	-1.02	0.04	0.50	0.57	0.55	0.62
CHN	-0.74	0.79	0.62	-0.38	0.81	0.08	0.11	2.72	0.50
CHL	1.25	0.68	0.62		0.00	0.71	0.30	0.00	0.50
THA	-0.55	0.70	0.43	0.04	-0.03	0.33	0.77	0.91	0.33
POL	0.90	0.35	1.22	0.03	0.79	0.38	-1.28	-0.02	0.29
IDN	-0.42	0.48	0.47	-0.17	0.31	0.35	0.77	0.54	0.29
ISR	0.63	1.13	0.95	0.38	-0.13	-0.13	-0.69	-0.09	0.26
CZE	0.95	0.88	1.21	-0.17	0.61	0.09	-2.09	0.17	0.21
PER	-0.44	-0.39	-0.65	-0.12	1.24	0.20	0.81	0.54	0.15
TUR	-0.33	0.67	0.40	-0.50	0.33	0.65	-0.87	-0.08	0.03
PHL	-0.39	-0.44	0.02	-0.28	-0.17	-0.32	1.13	0.37	-0.01
IND	-0.50	-0.35	-0.38	-0.32	0.39	-0.16	0.46	0.78	-0.01
ROM	0.04	-0.27	0.01	-0.62	0.73	-0.04	-0.61	0.36	-0.05
RUS	-0.99	0.96	1.07	-1.45	0.28	-0.32	-1.02	0.57	-0.11
ZAF	0.10	0.40	-1.23	1.05	-0.06	0.88	-0.06	-2.10	-0.13
HUN	0.47	0.68	0.45	-0.87	0.18	0.02	-1.95	-0.23	-0.16
MEX	-0.45	0.29	-0.35	-0.58	-0.22	-0.31	0.07	0.07	-0.19
BRZ	-0.22	0.07	0.52	-0.37	-0.60	-0.90	-0.75	0.11	-0.27
COL	-0.50	-0.27	-0.66	-0.75	0.02	-0.65	-0.06	-0.16	-0.38
UKR	-1.12	0.25	1.29	-1.39	0.22	-0.71	-1.74	0.06	-0.39
ARG	-0.60	-0.39	0.54	-2.05	-0.43	-2.03	-0.32	0.15	-0.64
VEN	-1.81	-1.33	-0.26	-2.23	-0.64	-2.51	-1.20	-0.18	-1.27
Asia average	0.30	1.24	1.07	0.31	0.24	0.71	0.68	0.82	0.67
EMEA average	0.07	0.56	0.60	-0.39	0.33	0.09	-1.14	-0.15	-0.01
LatAm average	-0.39	-0.19	-0.03	-0.82	-0.09	-0.78	-0.16	0.08	-0.30
EM average	0.03	0.62	0.61	-0.24	0.18	0.10	-0.18	0.28	0.18



value >= 0.15
value >-0.15 and <0.15
value <=-0.15

Source: Deutsche Bank

The to-do list

Singapore's authorities have recognized the need to transform the economy to one that is a hub for excellence in a wide range of manufacturing and services-related activities. There has been substantial progress made in recent years in pushing for higher value-added manufacturing, attracting investment in wealth management, insurance, education, healthcare, gaming, IT, and hi-tech research, which have created high-quality jobs and dynamic sectors that act as draws to domestics and foreigners alike. There is also a need to create an urban ecosystem conducive to fostering innovation and creativity, a process much easier said than done.

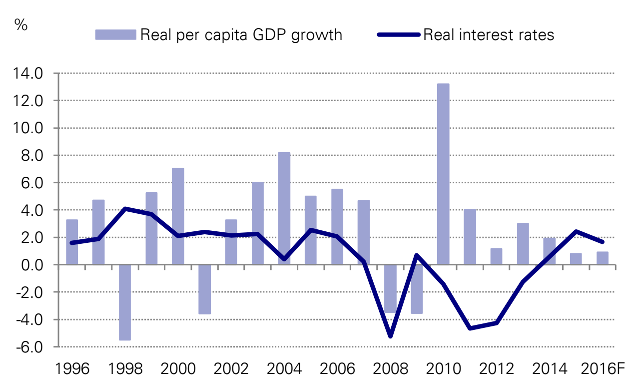
While it is clear that labor intensive businesses have to make way for more automation; the challenge would be to upgrade the skills of workers to contribute fruitfully to an evolving business environment. The government has begun offering re-training grants to the citizens, which may be a good start in this area. Singapore also needs to stay at the forefront of initiatives to foster regional integration and market access that would help its businesses to grow on the back of ASEAN demand, in particular.

In addition to structural measures, macroeconomic policies may have additional room to play. Additional fiscal measures to improve coverage of health, pension, and education, and improve affordability could ease the insecurity of the population. The government has steadily increased its outlays in these areas over the past decade, but should probably do more, given the high cost of housing, education, and seemingly insufficient retirement-related savings in the economy. The fiscal cost of additional safety net measures may be an inevitable burden, necessitating higher taxes, but that may be unavoidable, and need not come at the risk of endangering fiscal prudence as long as the spending is targeted well, boosts consumption, and supports growth. The government may have already been cognizant of this; its projected budget surplus position for FY2016, partly made possible by the incorporation of Temasek's estimated long-term real earnings in its budget framework, implies there is space to augment spending (by at least 0.8% of GDP to yield a balanced budget) should global economic conditions worsen.

Monetary policy may need to be tweaked to ensure a positive growth-interest rate differential that is essential to ensure household debt sustainability. Responding to increased downside risks to Singapore's economic outlook, the MAS shifted the slope of the SGD policy band to neutral at its first scheduled policy meeting for 2016. Questions have been raised among economic commentators on the limits of monetary policy given that prior to this latest decision on April 14, a zero appreciation path for the SGD NEER was only imposed during periods of recession in 2001–03 and 2008-09 in Singapore's 16-year history. How will monetary policy respond further to protracted disinflationary forces, or an outright economic recession?

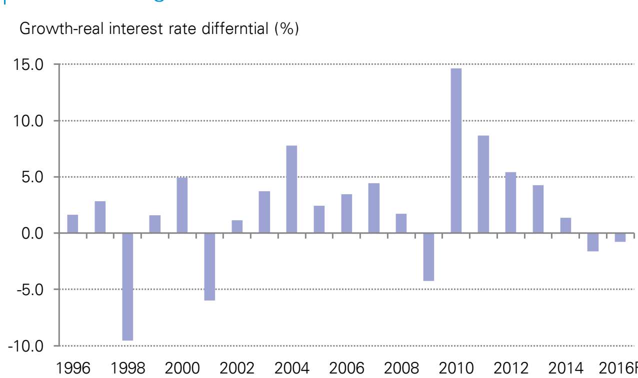
Given the trend of rising rates in the US, nominal rates in Singapore have begun rising, which in the presence of negative inflation has caused real rates to rise. With the MAS not controlling interest rate policy, but at the same time its liquidity measures to influence the NEER band not helping rates, the question is if Singapore can tolerate higher interest rates at this juncture. With the debt burden so high, we see the answer as a simple no.

Real growth per capita is below the real interest rate



Real interest rate is calculated as the difference between 5yr government bond yield and annual average headline inflation.
Source: CEIC and Deutsche Bank

Unfavorable growth-interest rate differential



Real interest rate is calculated as the difference between 5yr government bond yield and annual average headline inflation.
Source: CEIC and Deutsche Bank

The authorities have done well in recent years to work within the confines of their monetary policy framework, using macro-prudential measures to cool the market for properties and autos. Such measures should continue, but at the same time, MAS may have to provide clearer guidance about what it can do further to revive inflation expectation while ensuring financial sector stability.

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Appendix 1

Important Disclosures

Additional information available upon request

*Prices are current as of the end of the previous trading session unless otherwise indicated and are sourced from local exchanges via Reuters, Bloomberg and other vendors . Other information is sourced from Deutsche Bank, subject companies, and other sources. For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at http://gm.db.com/ger/disclosure/DisclosureDirectory.eqsr

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