January 02, 2018

Economics Group

Special Commentary

Jay H. Bryson, Global Economist
jay.bryson@wellsfargo.com • (704) 410-3274
Michael Pugliese, Economic Analyst
michael.d.pugliese@wellsfargo.com • (704) 410-3156

Singaporean Growth Strengthens but Challenges Remain

Executive Summary

Singapore's economy is often viewed as a bellwether for the global economy as a whole, and the pick-up in economic growth in Singapore in 2017 mirrors the rebound in global growth that occurred last year. Real GDP growth in Singapore was 3.5 percent in 2017, up from just 2.0 percent in 2016. Preliminary data for Q4-2017 showed continued strength in manufacturing output while the service sector returned to its pre-2016 pace of growth.

In a previous report, we highlighted the challenges we expect Singapore's economy to face in the years ahead, such as a shrinking working-age population and slower trend growth in global trade. In addition to these factors, we consider another obstacle to faster long-run growth: the high cost of housing in the Lion City. Singapore has experienced a few episodes of rapidly rising house prices over the past few decades, and this increase in housing costs may have "crowded" out other areas of consumer spending, particularly for lower-income households. With a structural downshift in global trade, an aging population and relatively high house prices, potential growth in Singapore's economy will likely remain below the rapid growth rates seen in previous decades.

GDP Growth Slows in Q4 as the Construction Sector Remains Weak

Real GDP grew 3.5 percent over the course of 2017.

Recently released preliminary data show that real GDP in Singapore grew at an annualized rate of 2.8 percent on a sequential basis in Q4-2017, which was 1.2 percentage points stronger than the consensus forecast. Because real GDP in the Lion City tends to be volatile on a sequential basis, we prefer to focus on the year-over-year growth rate, which smooths out some of the volatility. On that basis, real GDP decelerated in Q4-2017 (Figure 1). Base effects played a role in the slowdown, however, as a double-digit surge in real GDP growth occurred in Q4-2016. Real GDP grew 3.5 percent over the course of 2017, up from the 2.0 percent rate that was registered in 2016 and putting Singapore on track to more or less match the growth in global real GDP in 2017.

Figure 1

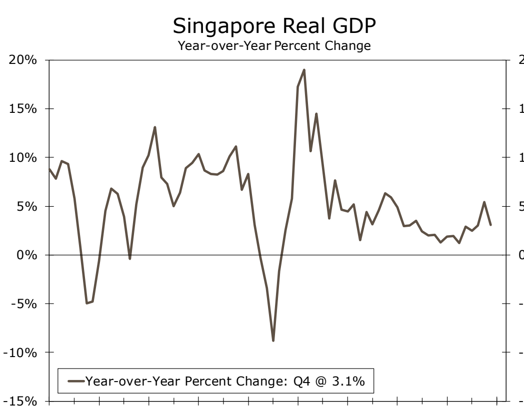
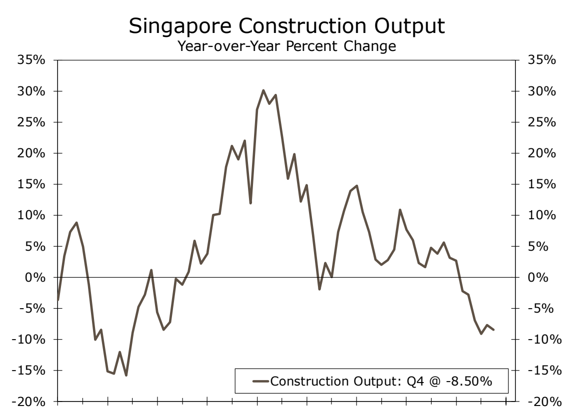


Figure 2



Source: IHS Global Insight and Wells Fargo Securities

Together we'll go far

This report is available on wellsfargo.com/economics and on Bloomberg WFRE.

The construction sector remains weak.

The services-producing sector drove growth in the quarter, as output in the volatile manufacturing sector fell in Q4 on the heels of a 38 percent surge in Q3. The rebound in the global economy has provided a clear boost to Singapore's real GDP growth, but weakness in the construction sector has been a modest counterweight to the cyclical strength. Construction sector output was down 8.5 percent year-over-year in Q4, the fifth consecutive quarter this sector was in negative territory (Figure 2). The Ministry of Trade and Industry noted that the contraction was largely due to weakness in private sector construction.

In a report we wrote last year, we highlighted some factors that likely will exert headwinds on the rate of economic growth in Singapore in the long run.[1] Specifically, the downshift in global trade growth and the approaching decline in the working-age population in coming years could weigh on Singapore's long-run growth rate. These factors have not changed much in the months since we wrote that report, so we will not delve further into them in this report. We will simply refer interested readers to our earlier analysis. In the remainder of this report, we focus on another factor that may already have had detrimental effects on GDP growth, and which could continue to exert a slowing effect on economic growth in the Lion City in coming years. Namely, we focus on the high cost of housing in Singapore.

The Detrimental Effect of Mushrooming House Prices

With 5.6 million people crammed into an area of only 709 square kilometers (roughly the same area as the five boroughs of New York City) Singapore is one of the most densely populated countries in the world. Densely populated areas tend to have high housing costs, and Singapore is no exception to this general rule. The median price today of a private residence outside of the central region is more than SGD 9000 per square meter (about $750 per square foot). In the central region of Singapore the median price is SGD 15,000 per square meter (roughly $1250 per square foot).

Singapore has experienced a few episodes of rapidly rising house prices.

As shown in Figure 3, Singapore has experienced a few episodes of rapidly rising house prices over the past few decades. House prices tripled in the decade leading up to the 1997-98 Asian economic crisis. The subsequent deep recession—Singaporean GDP plunged more than 5 percent on a peak-to-trough basis—and tight financing conditions led to a marked retrenchment in house prices. After another spike and subsequent retrenchment in the past decade, prices took off again, rising about 60 percent between 2009 and 2013. House prices have trended lower over the past few years, but they remain 40 percent higher today than they were in 2009.

Figure 3

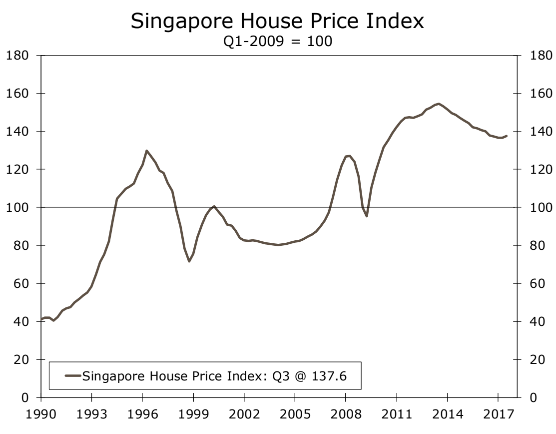
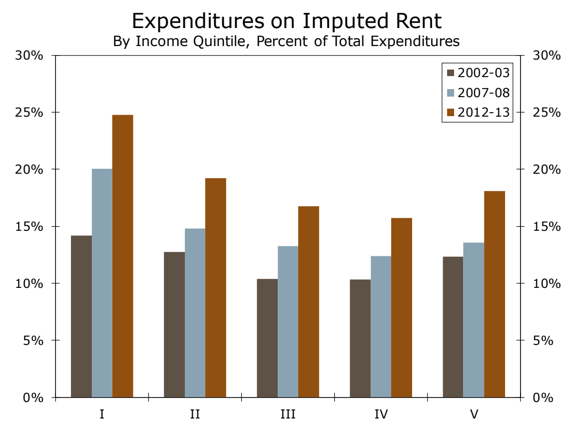


Figure 4



Source: CEIC, Singapore Department of Statistics and Wells Fargo Securities

This sharp rise in house prices has had a marked effect on the cost of living in Singapore. In 2002-03, imputed rent accounted for 12 percent of average monthly household expenditures.[2] By

[1] See "Singapore Growth Remained Modest in Q1" (April 13, 2017), which is available upon request.
[2] Because the cost of an owner-occupied house is amortized over a number of years, statistical authorities need to calculate a concept known as "imputed rent" to measure the change in housing costs

2012-13 (latest available data), imputed rent represented 18 percent of average monthly household expenditures. The proportion has probably edged lower over the past few years as house prices have trended lower, but it likely is not back to where it was a decade ago. In the United States, imputed rent accounts for about 11 percent of total personal consumption expenditures.

Poorer households have been especially hard hit by rising house prices.

While all households have experienced an increase in housing costs, poorer households have generally been harder hit than richer ones. In 2002-03, imputed rent accounted for 14 percent of expenditures among households in the bottom quintile of the income distribution (Figure 4). That proportion had shot up to 25 percent a decade later. Households in the upward quintile of the income distribution saw the amount they spend on imputed rent rise from 12 percent in 2002-03 to 18 percent a decade later.

This increase in housing costs may have "crowded" out other areas of consumer spending in Singapore. Growth in real retail spending, which does not include imputed rent, grew strongly in the middle years of the past decade (Figure 5). Yes, house prices were rising sharply in these years, but robust growth in Singaporean exports and strong demographics in the Lion City were supportive of strong income growth. However, income growth has slowed markedly in recent years, so high housing costs are now more problematic for consumers.[3] We do not forecast house prices in Singapore but Figure 3 indicates that they have largely stabilized in recent quarters. Consequently, homeowners in the Lion City may not get much relief going forward if house price remain at current levels.

Figure 5

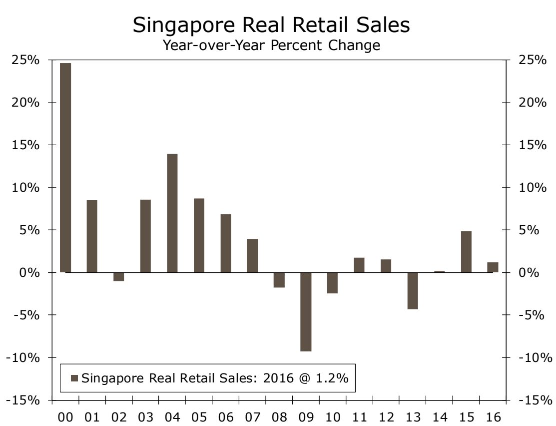
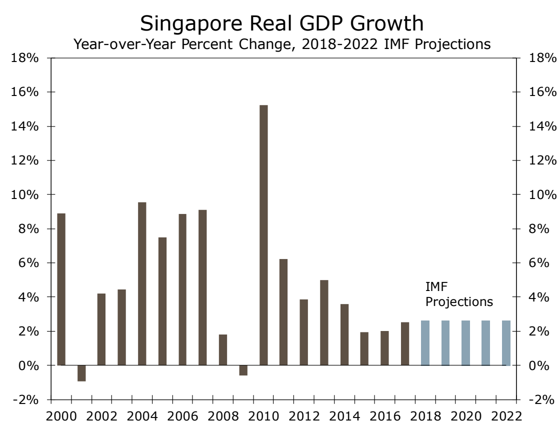


Figure 6



Source: IHS Global Insight, International Monetary Fund and Wells Fargo Securities

We also do not explicitly forecast real GDP growth in Singapore. However, the most recent forecast from the International Monetary Fund (October 2017) looks for real GDP growth in the Lion City to edge down to 2.6 percent in 2018 and remain near that rate through 2022 (Figure 6). Given some of the underlying challenges that Singapore faces, which we have already discussed, this forecast looks more or less reasonable to us.

Conclusion

Economic growth in Singapore is tightly linked to growth in the global economy as a whole, and as a result 2017 saw an economic turnaround in the Lion City after a couple years of particularly slow growth. However, structural challenges will likely prevent the Singaporean economy from returning to the sustained growth rates of nearly 10 percent experienced over the past few expansions. The rapid pace of globalization and corresponding rise in global trade has

on a monthly, quarterly or annual basis. Imputed rent is the value of the service provided by the owner-occupied house, and it essentially measures the amount of rent that the owner would charge if she were renting the house to herself.

[3] **Nominal disposable national income grew at an annual average rate of 10 percent between 2002 and 2007. Between 2011 and 2016 growth averaged only 3 percent per annum.**

downshifted, with no obvious catalyst on the horizon that would spark another period of supercharged global integration. The population is aging in Singapore, a common theme across the developed world that has little bearing on the quarterly GDP prints but exerts an invisible drag on trend growth behind the scenes. In addition, high housing costs have squeezed some households, particularly lower-income ones. High housing costs in land-strapped areas can be a difficult puzzle for policymakers to solve, and coupled with the other structural challenges facing the Singapore economy, suggest to us that the IMF's forecast of roughly two-and-a-half percent real GDP growth through 2022 is more or less reasonable.

Wells Fargo Securities Economics Group

Diane Schumaker-Krieg	Global Head of Research, Economics & Strategy	(704) 410-1801 (212) 214-5070	diane.schumaker@wellsfargo.com
John E. Silvia, Ph.D.	Chief Economist	(704) 410-3275	john.silvia@wellsfargo.com
Mark Vitner	Senior Economist	(704) 410-3277	mark.vitner@wellsfargo.com
Jay H. Bryson, Ph.D.	Global Economist	(704) 410-3274	jay.bryson@wellsfargo.com
Sam Bullard	Senior Economist	(704) 410-3280	sam.bullard@wellsfargo.com
Nick Bennenbroek	Currency Strategist	(212) 214-5636	nicholas.bennenbroek@wellsfargo.com
Eugenio J. Alemán, Ph.D.	Senior Economist	(704) 410-3273	eugenio.j.aleman@wellsfargo.com
Azhar Iqbal	Econometrician	(704) 410-3270	azhar.iqbal@wellsfargo.com
Tim Quinlan	Senior Economist	(704) 410-3283	tim.quinlan@wellsfargo.com
Eric Viloria, CFA	Currency Strategist	(212) 214-5637	eric.viloria@wellsfargo.com
Sarah House	Economist	(704) 410-3282	sarah.house@wellsfargo.com
Michael A. Brown	Economist	(704) 410-3278	michael.a.brown@wellsfargo.com
Jamie Feik	Economist	(704) 410-3291	jamie.feik@wellsfargo.com
Erik Nelson	Currency Strategist	(212) 214-5652	erik.f.nelson@wellsfargo.com
Michael Pugliese	Economic Analyst	(704) 410-3156	michael.d.pugliese@wellsfargo.com
Harry Pershing	Economic Analyst	(704) 410-3034	harry.pershing@wellsfargo.com
Hank Carmichael	Economic Analyst	(704) 410-3059	john.h.carmichael@wellsfargo.com
Ariana Vaisey	Economic Analyst	(704) 410-1309	ariana.b.vaisey@wellsfargo.com
Abigail Kinnaman	Economic Analyst	(704) 410-1570	abigail.kinnaman@wellsfargo.com
Shannon Seery	Economic Analyst	(704) 410-1681	shannon.seery@wellsfargo.com
Donna LaFleur	Executive Assistant	(704) 410-3279	donna.lafleur@wellsfargo.com
Dawne Howes	Administrative Assistant	(704) 410-3272	dawne.howes@wellsfargo.com

WELLS FARGO SECURITIES