

Economics Group

Special Commentary

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Can Taiwan's Economy Maintain Its Momentum?

Executive Summary

The economic slowdown Taiwan experienced over the 2015-2016 period reversed course last year, as economic growth registered 2.8 percent for the year, the best pace since 2014. Taiwan's relatively small, open economy has been a beneficiary of the firming global growth environment, propelling growth on the island nation back to rates seen earlier in the expansion. Given the recent acceleration in GDP, can Taiwan keep the momentum going and return to the robust growth rates it experienced in the past couple of economic expansions? Or will economic growth stall at or below the pace that occurred over the 2012-2014 stretch?

We believe the latter scenario is far more likely than the former. An aging population and low levels of domestic investment do not bode well for labor force and productivity growth, the two key ingredients for a sustained return to real GDP growth of 5 percent or more. We identify greater public infrastructure spending as a potential upside risk to the outlook, but there are likely limits on the extent to which this could single-handedly boost domestic investment and subsequently productivity growth. The International Monetary Fund (IMF) looks for annual growth rates on the order of 2 percent or so between 2018 and 2022, and the long-run consensus forecast expects that real GDP growth in Taiwan will remain unchanged around 2 percent per annum from 2023 through 2027. We do not explicitly forecast real GDP growth in Taiwan, but these forecasts look reasonable to us due to the underlying economic fundamentals.

Real GDP Accelerates in Q4, Topping Expectations

Data released today revealed that real GDP in Taiwan accelerated in Q4, reaching 3.3 percent year-over-year growth to end the year (Figure 1). The Bloomberg consensus expected a slowdown to 2.5 percent, down from the 3.1 percent pace registered in Q3-2017. The favorable global growth environment was evident in Taiwan's GDP data: net demand from the rest of the world contributed 3.0 percentage points to headline growth amid solid export growth and a deceleration in imports. Private consumption accelerated to nearly a 3 percent year-over-year pace, but otherwise domestic demand was soft. Government spending was weak, declining 1.3 percent year over year, and gross capital formation was a disappointment given the headline beat. After the largest year-over-year decline in more than five years in Q3, gross capital formation growth remained in negative territory at -4.8 percent. The weakness in investment was mainly due to a decrease in machinery and equipment investment.

Inflation firmed in Q4 alongside the faster economic growth. Rising oil prices contributed to some of the gain in headline CPI inflation, which was 1.2 percent year over year in December. Even excluding energy, however, core inflation came in at 1.6 percent year over year in December, up from 0.8 percent in September. This price growth is coming off of low levels, however, and strength in the currency should help keep a lid on inflation in the import-reliant nation. At its December meeting, the Taiwanese central bank indicated that it believes "both current inflation pressures and future inflation expectations are anchored." The central bank has remained on hold since easing policy in mid-2016, and with inflation under control and the output gap "remaining negative," monetary policy will likely remain on hold for now despite the strong finish to 2017.

The economic slowdown Taiwan experienced over the 2015-2016 period reversed course last year.

The favorable global growth environment was evident in Taiwan's GDP data.

Together we'll go far



Figure 1

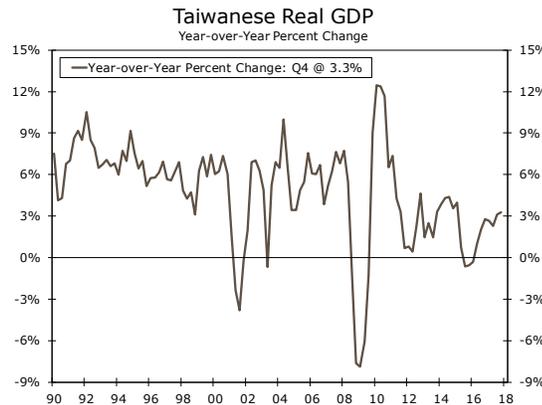
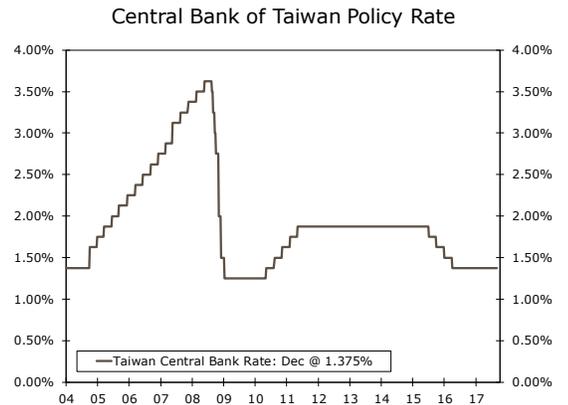


Figure 2



Source: IHS Global Insight, Bloomberg LP and Wells Fargo Securities

Foreign spending on Taiwanese goods and services accounts for about 40 percent of the value added that is generated in Taiwan.

In a report that we wrote last year, we highlighted some of the demand-side factors that may restrain the rate of real GDP growth in Taiwan for the foreseeable future.¹ Specifically, foreign spending on Taiwanese goods and services accounts for about 40 percent of the value added that is generated in Taiwan. If global GDP continues to grow at its recent modest pace, which seems likely to us, then Taiwanese export growth probably will remain restrained, at least relative to the breakneck pace of a decade ago when the global economy was booming. Second, the increase in household leverage over the past decade or so could lead to slower growth in consumer spending, especially if interest rates rise. However, our intent in this report is to focus on supply-side factors that will influence economic growth in coming years. We refer interested readers to the report referenced above for further discussion of demand-side factors in Taiwan.

The Importance of Labor Force Growth and Productivity Growth

The annual rate of real GDP growth in Taiwan has been moderating on trend over the past 30 years (see Figure 1). Between 1988 and the start of the Asian economic crisis in 1997, real GDP in Taiwan grew at an average rate in excess of 7 percent per annum (Figure 3). Growth in the following decade (1998-2007) downshifted a bit, but still averaged a respectable rate of 5 percent per annum. However, economic growth in Taiwan in the post-crisis era has been anemic. Between 2011 and 2017, real GDP grew at an annual average rate of only 2.4 percent.

Figure 3

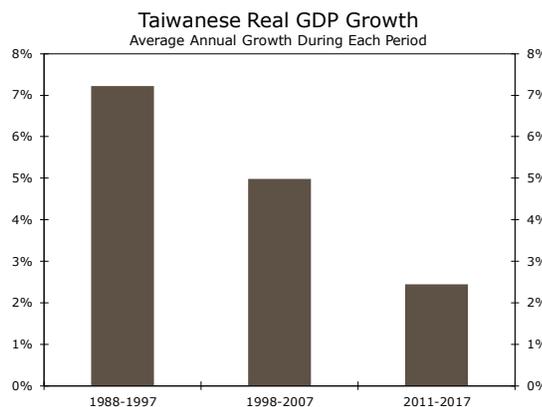
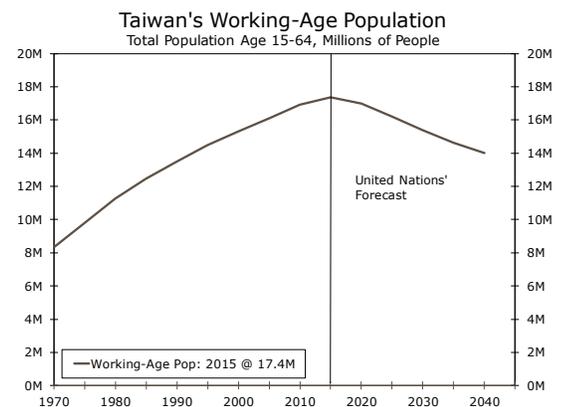


Figure 4



Source: IHS Global Insight, United Nations and Wells Fargo Securities

¹ See "Taiwan GDP Expands in Q1, But Challenges Remain" (May 1, 2017), which is available upon request.

The slowdown in Taiwanese economic growth has coincided with changing demographics on the island. During the 1980s, the working-age population, which includes individuals between the ages of 15 and 64, was growing in excess of 2 percent per year (Figure 4). The working age population decelerated in the 1990s and the first decade of the 21st century, but it continued to grow at roughly 1 percent per year. The population of this cohort topped out around 2015, however, and is now declining. If an economy has fewer individuals who are working, it will be able to produce fewer goods and services (i.e., a lower level of GDP), everything else equal.

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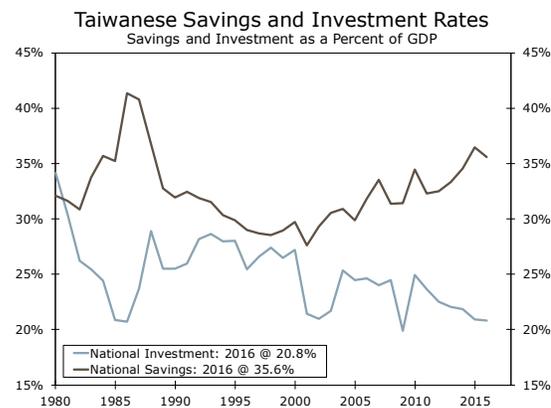
However, everything else may not necessarily be equal. Even if the number of workers declines, GDP can still grow if productivity growth is strong enough (productivity is the amount of goods and services that each worker can produce). Productivity growth in the Taiwanese industrial sector remains positive, but it too has slowed markedly in recent years (Figure 5).² Slower productivity growth equals slower economic growth, everything else equal.

There are many factors that could cause productivity growth to slow, and no single factor should be considered to be the sole culprit, but the deceleration in investment spending that has occurred in recent decades likely has played a role in the slowdown in Taiwanese productivity growth. That is, growth in productivity should be expected to slow if the capital stock is not being renewed and expanded as rapidly as previously. In the early 1980s, the national savings and investment rates in Taiwan stood at 30 percent of GDP (Figure 6). Although the national savings rate remains in excess of 30 percent of GDP today, the national investment rate has trended down to about 20 percent.³

Figure 5



Figure 6



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

Deceleration in investment spending has been broad-based over the past few decades. As shown in Figure 7, overall investment spending grew nearly 10 percent per annum between 1988 and 1997. Construction spending accounted for nearly one-half of the growth in overall investment spending during that period, but business spending on machinery and equipment also grew strongly. Construction spending actually contracted during the 1998-2007 period, while business spending on machinery and equipment also decelerated markedly. Growth in overall investment spending has been lackluster across the board during the current decade.

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Could this sharp slowdown in investment spending be reversed, providing a boost to both short-run economic growth through greater demand and long-run economic growth through faster productivity growth? Construction spending and machinery & equipment spending account for

² Data on productivity growth in the overall Taiwanese economy are not readily available. The industrial sector accounts for about 30 percent of value added in Taiwan.

³ As we discussed in our previous report, the widening surfeit of national savings over national investment has led to widening current account surpluses in Taiwan over the past two decades.

about 70 percent of total gross fixed capital formation, suggesting a turnaround would likely need to come from one of these two sectors.

Figure 7

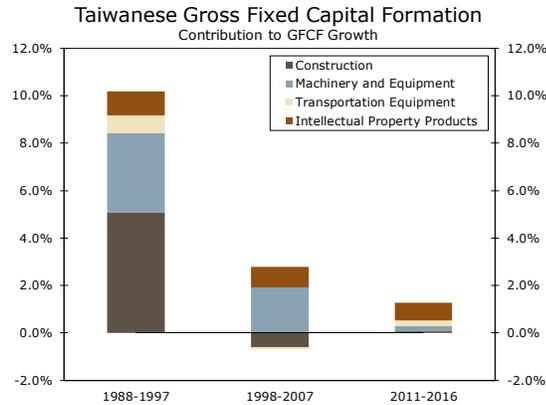
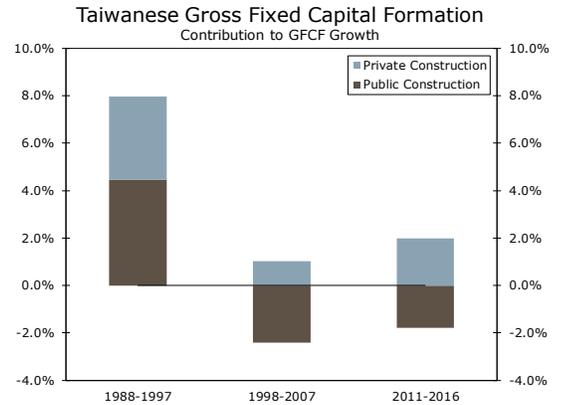


Figure 8



Source: CEIC and Wells Fargo Securities

The spark for such a sustained surge in private equipment investment is not immediately evident to us.

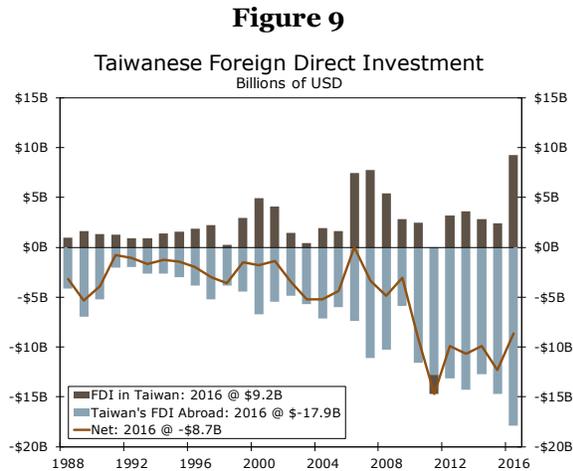
The overwhelming share (roughly 86 percent) of machinery & equipment spending comes from the private sector, suggesting firms will need to experience or anticipate some combination of stronger domestic or foreign demand. With an aging population and an open, export-oriented economy, robust foreign demand is a more likely driver of greater private sector investment in machinery & equipment, in our view. Given our outlook for real global GDP growth near its long-run average and for gradually slowing economic growth in mainland China, Taiwan's biggest trading partner, the spark for such a sustained surge in private equipment investment is not immediately evident to us.

Taiwan's government is in relatively good fiscal health, with a government debt-to-GDP ratio of just 36 percent.

On the construction side, however, a deeper dive into the data shows spending on public construction has been particularly weak since the late 1990s (Figure 8). Although private construction spending growth has been soft, public spending has been outright contractionary on average over the past two decades. Taiwan's government is in relatively good fiscal health, with a government debt-to-GDP ratio of just 36 percent and a high national savings rate, suggesting some scope for expansionary fiscal policy directed toward construction and infrastructure. Last year, the Taiwanese government took a step in this direction by initiating the Forward-Looking Infrastructure Development Program. In short, the program will be funded with about TWD 420 billion (about \$14.4 billion in USD) over four years, with the money spent on a slew of different infrastructure and economic development-related initiatives. This new program alone is unlikely to return Taiwan to the growth rates of the past; a short report from the executive branch of government suggests economic growth will be about 0.1 percentage point higher in each of the next four years due to the program.⁴ Even so, this is an area we identify as the potential source of upside risk to the economic outlook for both short-run aggregate demand and long-run potential growth.

Attractive opportunities in other countries may also have weighed on Taiwanese investment spending growth in recent years. Before the turn of the century, direct investment by Taiwanese businesses in foreign economies averaged about \$4 billion per year (Figure 9). However, Taiwanese foreign direct investment (FDI) abroad accelerated in the early years of the past decade and totaled \$18 billion in 2016. Meanwhile, FDI in Taiwan remained more or less flat, although it did jump up to \$9 billion in 2016. We do not have a breakdown of FDI by country, but mainland China undoubtedly is a major destination for outbound Taiwanese investment.

⁴ Executive Yuan, Republic of China. (September 2017). "Forward-looking infrastructure: Foundation for future growth." A link to the report can be found [here](#).



Source: IHS Global Insight and Wells Fargo Securities

Conclusion

The Taiwanese economy has largely recovered from the slowdown it experienced in 2015 and 2016 when global trade slowed sharply. The year-over-year rate of real GDP growth picked up speed in the second half of 2017, and the 2.8 percent growth rate that was registered over the course of the entire year was the strongest full-year GDP growth rate since 2014. Real GDP growth may wax and wane over the course of any cycle, but real GDP growth in Taiwan has been slowing on trend over the past two decades. Not only has growth in the working-age population slowed, but productivity has decelerated as well.

The rate of economic growth in Taiwan will probably remain lackluster for the foreseeable future. The IMF looks for annual growth rates on the order of 2 percent or so between 2018 and 2022, and the long-run consensus forecast expects that real GDP growth in Taiwan will remain unchanged around 2 percent per annum from 2023 through 2027. We do not explicitly forecast real GDP growth in Taiwan, but these forecasts look reasonable to us due to the underlying economic fundamentals. For starters, the working-age population is now declining and the United Nations projects that it will continue to do so over the next few decades. In addition, productivity growth has downshifted from its previous breakneck pace.

The demographics of the working-age population are essentially locked in place in the near to medium term, so the way to affect the potential growth rate of the Taiwanese economy over that horizon is via productivity growth. However, it is not readily apparent what would cause productivity to accelerate meaningfully in the foreseeable future. Growth in investment spending has been sluggish in recent years, and there is no indication that capex is about to enter a sustained upswing. Stronger public investment spending is one potential source of more robust capex, but there are likely limits on the extent to which this could single-handedly boost productivity growth. A major technological breakthrough could lead to stronger productivity growth, but what exactly would that breakthrough be? We are left to conclude that the Taiwanese economy will likely continue to grow only modestly in coming years.

The rate of economic growth in Taiwan will probably remain lackluster for the foreseeable future.

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