# U.S.-China Economic and Security Review Commission

Staff Research Report



**January 6, 2016** 

# Taiwan's Economy amid Political Transition

Kevin Rosier, Former Senior Policy Analyst, Economics and Trade

Sean O'Connor, Research Fellow, Economics and Trade

Rolando Cuevas, Former Research Intern, Economics and Trade

**Disclaimer**: This paper is the product of professional research performed by staff of the U.S.-China Economic and Security Review Commission, and was prepared at the request of the Commission to support its deliberations. Posting of the report to the Commission's website is intended to promote greater public understanding of the issues addressed by the Commission in its ongoing assessment of U.S.-China economic relations and their implications for U.S. security, as mandated by Public Law 106-398 and Public Law 108-7. However, the public release of this document does not necessarily imply an endorsement by the Commission, any individual Commissioner, or the Commission's other professional staff, of the views or conclusions expressed in this staff research report.

## **Table of Contents**

Executive Summary	3
Election 2016: Debating Taiwan's Economic Future	4
The KMT Economy: From President Ma to Candidate Chu	5
Tsai Ing-wen's Vision for a DPP-Led Economy	7
Taiwan's Domestic Economy	8
Growth Slump	8
Labor Market	10
Prices and Cost of Living	13
Public Debt	14
Taiwan's Energy Dilemma	15
Innovation and Entrepreneurship	16
Taiwan in the Global Economy	18
Cross-Strait Economic Relations	22
Taiwan and the United States	25
Taiwan and the Association of Southeast Asian Nations (ASEAN)	28
Taiwan and Japan	28
Taiwan and its Free Trade Partners	29
Conclusions	30
Appendix	31
Appendix I: The DPP's Economic Leadership	31
Appendix II: Select Taiwan Trade Partners	33

## **Executive Summary**

On January 16, 2016, Taiwan's citizens will elect a new president and legislature in what is widely expected to mark an important political transition. After eight years under Chinese Nationalist Party (Kuomintang, or KMT) President Ma Ying-jeou, Taiwan's electorate has grown largely dissatisfied with the state of the domestic economy and increasingly worried about Taiwan's growing dependence on China. This has led to a highly anticipated transition of executive, and potentially, legislative power to the opposition party, the Democratic Progressive Party (DPP), under the leadership of presidential candidate Tsai Ing-wen.

In a notable change from the past, both major political parties have shifted the focus of their campaigns from the politically sensitive questions of Taiwan's sovereignty to economic issues. The nuanced differences between the DPP's and KMT's economic platforms are largely expected to determine how Taiwan voters will cast their ballots. Amid stagnant growth and wages, the DPP has focused its campaign on improving Taiwan's domestic economy through expanded social welfare benefits, a higher minimum wage, and new local sources of innovation. Meanwhile, the KMT's economic platform is largely defined by promoting Taiwan's external economic relations, especially with China, as a means of supporting export-led growth.

The gloomy state of Taiwan's domestic economy under eight years of KMT rule may explain why Dr. Tsai has maintained a commanding lead throughout the campaign season. In 2015, Taiwan's growth slowed to nearly zero as exports dropped significantly amid China's economic slowdown. At the same time, real wages have remained stagnant under the Ma Administration, and higher-skilled workers, who make up the lion's share of Taiwan's workforce, face a higher risk of unemployment. The threats of rising public debt, weak inbound investment, and a dependence on China as Taiwan's top export market are also influencing how Taiwan voters view the current politico-economic climate ahead of the election.

Because of the importance of exports to Taiwan's economy, with China ranking as its top trade partner, Taiwan's economy has become dependent on China and vulnerable to fluctuations in China's economy. This has led to both the DPP and the KMT advocating for a diversification of Taiwan's export markets. However, the two parties diverge in their strategies toward this diversification. The KMT advocates for Taiwan's participation in a wide range of free trade agreements (FTAs), including the Regional Comprehensive Economic Partnership (RCEP), to which China is a negotiating partner. The DPP, on the other hand, has focused its campaign on promoting Taiwan's participation in the U.S.-backed Trans-Pacific Partnership (TPP).

The KMT's inclusion of RCEP in its vision for Taiwan's free trade strategy necessitates—first and foremost—that it supports concluding all pending agreements under the Cross-Straits Economic Cooperation Framework Agreement (ECFA); these agreements have been the source of significant dissent in Taiwan, culminating in the 2014 Sunflower Movement. The DPP campaign has pledged that it will not advance any ECFA-related agreements until a cross-Strait supervisory bill is passed by Taiwan's Legislative Yuan, establishing a supervisory review to monitor all agreements between China and Taiwan. Because a supervisory review will likely require some ECFA agreements to be renegotiated, which China may be reluctant to do, progress on ECFA is expected to be slow, regardless of which party wins the election. While the DPP does not oppose ECFA, it has emphasized the importance of establishing supervisory review to approve all cross-Strait economic agreements.

The DPP's prioritization of Taiwan's participation in the TPP implies it might be more inclined to finalize ongoing talks toward a U.S.-Taiwan Trade and Investment Framework Agreement (TIFA). TIFA talks have stalled of late due to Taiwan's restrictions on U.S. pork exports. Because the DPP has political ties with the agricultural sector in Taiwan, it may be uniquely positioned to make progress on this issue. Under a DPP administration, Taiwan may also consider expanding its economic cooperation with other key trade partners, such as Southeast Asian countries and Japan, as a means of trade diversification.

## **Election 2016: Debating Taiwan's Economic Future**

Since its transition to democracy in the early 1990s, Taiwan's presidential elections have largely been dictated by the political questions of sovereignty and potential unification with China.\*1 The debate made for a simple partisan division: the Chinese Nationalist Party (Kuomintang, or KMT), which has historical roots in China, based its platform on a variation of the "one China" principle through what has become known as the "1992 Consensus,"† while the Democratic Progressive Party (DPP), which grew out of the pro-democracy movements during the KMT's military rule, favored a path toward independence.² Over the past two decades, the question of Taiwan's sovereignty and the sensitivity surrounding this issue in China drew global attention to Taiwan's presidential elections and their implications for cross-Strait relations and regional stability.

The coming 2016 election has brought about a major paradigm shift in Taiwan politics, with the sovereignty issue being of less importance to most Taiwan voters than in the past.<sup>3</sup> In a notable change from the more staunchly proindependence DPP President Chen Shui-bian (2000–2008), the current DPP presidential candidate Tsai Ing-wen has advocated for maintaining the widely popular "status quo," which is undefined but may be interpreted to mean sustaining Taiwan's current high degree of political and economic autonomy without taking concrete steps toward unification with or formal independence from China.<sup>4</sup> Setting aside the sensitive question of Taiwan's sovereignty, Dr. Tsai has been able to focus her campaign primarily on domestic economic issues, which has helped her to garner a consistent and significant lead of around 30 percentage points in election polls.<sup>5</sup>

Meanwhile, the KMT has likewise touted support for the same undefined "status quo," though it has periodically waded back into the sovereignty debate this election season. Hung Hsiu-chu, the KMT's original presidential candidate and now the party's chief election advisor, faced fierce public opposition for her outspoken views on cross-Strait relations, especially her overt support for an unambiguous "one China" policy advocating for political unification with China. The KMT again faced protests when Taiwan's President Ma Ying-jeou, also of the KMT, announced a surprise, closed-door meeting with China's President Xi Jinping on November 8.8 Notwithstanding these political snags, the KMT has strived overall to realign itself with the "status quo" by ultimately selecting a moderate presidential candidate, New Taipei City Mayor Eric Chu, whose campaign slogan "One Taiwan" appears to reflect a pro-"status quo" platform. Mr. Chu expressed support for the November 8 Ma-Xi meeting and the general direction of cross-Strait relations under the Ma Administration, but has stopped short of making statements about closer political ties with China that would alter the "status quo."

Thus, with the politically charged question of Taiwan's sovereignty deliberately left unsettled by both major parties, Taiwan voters have turned their attention to more immediate problems as they prepare to choose their next president and legislative majority. With Taiwan's economic growth slowing to nearly zero and its labor market struggling to accommodate a largely high-skilled workforce, the future direction of Taiwan's economy now reigns as the top area of concern for most Taiwan voters this election season. That reality does not bode well for the incumbent KMT, which came to power at the peak of the 2008–2009 global financial crisis and has struggled to revive Taiwan's economy. Sluggish growth, stagnant wages, capital outflows, and rising prices have plagued Taiwan over the past decade. To increase economic growth, the Ma Administration (2008–2016) worked to expand cross-Strait economic ties. These efforts, however, gave rise to the student-led Sunflower Movement, which halted progress on cross-Strait economic agreements, handed a sweeping victory to opposition candidates in a slate of local elections in November 2014, and paved the way for a widely anticipated transition of executive, and potentially, legislative power to the DPP.

As Taiwan's electorate prepares to head to the polls on January 16, 2016, Taiwan's two major political parties have framed a debate about Taiwan's economic future: While the incumbent KMT generally views Taiwan's economic

<sup>\*</sup> For the purposes of this report, "China" refers to mainland China (the Mainland), or the People's Republic of China.

<sup>&</sup>lt;sup>†</sup> The "1992 Consensus" is a term developed by former Taiwan National Security Council Secretary-General Su Chi in 2000 in reference to a meeting between the China-based Association for Relations Across the Taiwan Strait (ARATS) and the Taiwan-based Straits Exchange Foundation, both semi-official bodies, where both sides allegedly agreed that only one China exists, but that both sides may maintain their own interpretations of what defines "China." China's government and the KMT maintain that the "1992 Consensus" exists, while the DPP and former President Lee Teng-hui, who was in office in 1992, deny its existence.

<sup>\*</sup> Hung Hsiu-Chu stated her support for a revised version of the "1992 Consensus" calling for a recognition of one China, with both sides of the Taiwan Strait agreeing to one interpretation of "China." Her comment was viewed widely as support for unification with China.

integration with the global economy, especially with its largest trade partner China, as key to future growth, the DPP has prioritized improving Taiwan's domestic economy and using local sources of growth to increase global competitiveness. This report seeks to shed additional light on these nuances, to provide an objective review of major economic indicators in Taiwan, and to evaluate the implications of political transition for Taiwan's economic relations with China, the United States, and the international community.

## The KMT Economy: From President Ma to Candidate Chu

In May 2008, Ma Ying-jeou officially became Taiwan's sixth president, shifting power from the DPP under former President Chen Shui-bian back to the KMT, which ruled Taiwan from 1945 to 2000. As a candidate, President Ma pledged to achieve in the first two years of his presidency what he called the "633 Plan," which sought to increase gross domestic product (GDP) growth to 6 percent, maintain an unemployment rate of less than 3 percent, and increase per capita income to over \$30,000. 14 President Ma's aspirations to boost Taiwan's domestic economy were quickly crushed as the 2008–2009 global financial crisis took its toll. As a small, liberalized economy, Taiwan was highly vulnerable to the global recession. President Ma used economic stimulus measures, including tax cuts and infrastructure spending, to offset the effects of the crisis. 15

Amid his economic recovery efforts, President Ma prioritized forging closer economic ties with China. Bolstered by a large economic stimulus, China had weathered the financial crisis well, maintaining growth rates between 9 and 10 percent. With China becoming Taiwan's largest trade partner, liberalizing cross-Strait trade and investment seemed to make economic sense and had the added benefit of easing political tensions with China through economic cooperation. In 2010, Ma's government succeeded in passing through the Legislative Yuan an historic early harvest free-trade pact with China known as the Cross-Strait Economic Cooperation Framework Agreement (ECFA). Within a year of passing ECFA, Taiwan enjoyed an unusually high GDP growth rate of 10.6 percent as trade with China increased. As a result, the Ma Administration seemed to have garnered enough momentum to proceed in negotiating with Beijing for further liberalization in goods and services trade as well as cross-Strait investment. In addition, the landmark agreement was thought to pave the way for Taiwan to pursue free trade agreements (FTAs)—which China had historically tried to block—with other countries. (By the end of the Ma Administration, Taiwan had signed economic cooperation agreements with New Zealand and Singapore and an investment protection agreement with Japan.)<sup>20</sup>

President Ma's confidence amid ECFA's accolades and Taiwan's impressive economic rebound in 2010 led him to declare a coming "Golden Decade" for Taiwan. His vision for the "Golden Decade" was based on four "assurances":

- To ensure the sovereignty of the Republic of China remains independent and unimpaired;
- To ensure the safety and prosperity of Taiwan;
- To ensure ethnic harmony and cross-Strait peace; and
- To ensure a sustainable environment and a just society.<sup>21</sup>

President Ma argued these four assurances would serve as the foundation for realizing eight "visions for the nation," chief among them being "a robust economy." To achieve these goals, President Ma prioritized stimulating innovation and said, "The government will focus on developing high-end technology in a bid to bolster industrial competitiveness." <sup>23</sup>

By 2012, the euphoria of Taiwan's economic recovery had tempered as voters again began to face slowing economic growth and an unchanging unemployment rate of over 4 percent.<sup>24</sup> Competing for reelection, President Ma faced a highly competitive race against DPP candidate Dr. Tsai. In an interview with the *New York Times* just prior to the election, President Ma cited the economy as the reason for such a close election, saying, "We hope to help more people, but the economic crisis [of 2008] upset our original plans and has led to an unemployment rate today of 4.3

<sup>\*</sup> An early harvest agreement is a precursor to a free trade agreement, with the trade of certain products liberalized before the entire free trade agreement is finalized.

<sup>†</sup> President Ma's eight visions included a robust economy, a just society, a clean and competent government, high-quality culture and education, environmental sustainability, well-rounded development, cross-Strait peace, and friendly relations with the international community.

percent as opposed to our target rate of 3 percent. The same is true of the gap between rich and poor."<sup>25</sup> Despite the deteriorating economic conditions in Taiwan, President Ma was reelected for a second term. President Ma's reelection, which was attributed primarily to his commitment to easing cross-Strait tensions, was lauded both in Taiwan and abroad.<sup>26</sup> However, President Ma's support declined significantly from 2008, with his victory margin slipping from 17 points in 2008 to 6 points in 2012.<sup>27</sup>

Within months of his reelection, President Ma's approval ratings dropped dramatically as he struggled to pass multiple controversial economic policies.<sup>28</sup> In April 2012, the Ma Administration announced it would increase energy prices by 10 percent, a policy that was quickly altered after it met extensive public opposition.<sup>29</sup> In the same month, President Ma's cabinet approved a capital gains tax on stock transactions that was fiercely opposed for allegedly favoring wealthy investors.<sup>30</sup> The government quickly revised the tax, which it set at 15 percent to better support "social justice."<sup>31,\*</sup> At the same time, President Ma unveiled his plan to implement a compulsory 12-year education system, which also faced staunch opposition from faculty members and students at Taiwan's top high schools who advocated for requiring high school entrance exams.<sup>32</sup>

Despite a tumultuous start to his second term, President Ma interpreted his reelection as a sign of widespread public support for his cross-Strait economic policies, and continued to advance negotiations toward the next phase of ECFA, which would include liberalizing multiple services sectors under the Cross-Strait Service Trade Agreement (CSSTA) and liberalizing additional goods sectors under a prospective cross-Strait trade in goods agreement. Opposition to the next phase of ECFA, particularly the CSSTA, spread rapidly amid concern that the agreement would primarily benefit large companies, especially those operating on both sides of the Taiwan Strait, while harming small and medium-sized enterprises.<sup>33</sup> Many in Taiwan also were uneasy about allowing for greater Chinese investment in sensitive sectors such as publishing, which may afford opportunities for China's media to influence Taiwan public opinion and infringe on free speech.<sup>34</sup> One poll by the Chinese-language magazine *Business Week* showed only 22.3 percent of Taiwan citizens supported the CSSTA.<sup>35</sup>

In March 2014, protestors occupied Taiwan's Legislative Yuan in opposition to the agreement. This grassroots, student-led protest movement was known as the Sunflower Movement. Widespread public opposition to the agreement and the efforts of Sunflower Movement activists managed to stall implementation of the CSSTA, and ultimately led to the Executive Yuan approving a cross-Strait supervisory bill. The Executive Yuan stated, "The draft bill, enacted in response to calls for a legally binding supervisory mechanism over cross-Strait agreements, integrates a four-stage communication and consultation mechanism with a national security screening system, and seeks to balance the public's right to know with the government's ability to conduct negotiations." The bill, along with many other pieces of draft legislation regarding the supervisory mechanism, was still pending in the Legislative Yuan at the time of this report's publication.

In November 2014, multiple KMT losses across several local elections in Taiwan were viewed as a clear sign that voters were dissatisfied with the direction in which the Ma Administration and KMT leaders were steering Taiwan's economy. Key municipalities saw DPP victories, and independent candidate Ko Wen-je secured the important position of Taipei mayor with support from the Pan-Green Coalition, which includes the DPP and the more staunchly pro-independence Taiwan Solidarity Union.<sup>38</sup> In a May 2015 interview with the *Wall Street Journal*, President Ma said the KMT's losses in the November 2014 local elections were "largely due to domestic issues" and were "not related to our mainland policy."<sup>39</sup> In April 2015, regarding the legacy of the Sunflower Movement, President Ma said, "Cross-Strait ties suffered a setback following the student movement last year, but the ties have since returned to normal."<sup>40</sup> Ma's comments seemed to reflect the KMT's belief that, despite the November 2014 losses, the party's approach to cross-Strait relations remained popular, even if its handling of the domestic economy lacked public support.

This might explain the KMT's strategy in the 2016 presidential campaign season to steer public attention toward cross-Strait relations. After a period of disarray within the KMT when it ousted Ms. Hung in favor of the party's

<sup>\*</sup> In November 2015, ahead of the election, the KMT voted to revoke the tax altogether effective January 1, 2016. Enru Lin, "Lawmakers Scrap Capital Gains Tax," *China Post* (Taiwan), November 18, 2015.

http://www.chinapost.com.tw/taiwan/business/2015/11/18/451219/Lawmakers-scrap.htm.

<sup>&</sup>lt;sup>†</sup> For more analysis of ECFA and the Sunflower Movement, see "Cross-Strait Economic Relations" later in this report and the U.S.-China Economic and Security Review Commission's 2015 Annual Report to Congress, November 2015, 491–492 and 496–497.

chairman, Mr. Chu, President Ma announced in November 2015 that he would meet with President Xi in Singapore four days later.<sup>41</sup> President Ma's critics quickly accused him and his KMT supporters of using the meeting, and cross-Strait relations generally, as a political tool in the final run up to the election.<sup>42</sup> After small protests broke out in response to the Ma-Xi meeting, Dr. Tsai urged dissenters to voice their opposition at the ballot box in the coming election.<sup>43</sup>

In the aftermath of the Ma-Xi visit, Mr. Chu appears to be maintaining his party's strategy of prioritizing Taiwan's external economic relations, particularly with China, over the domestic economy, which has struggled under the current KMT government. In an interview with the *Washington Post* during his November 2015 visit to Washington, DC, Mr. Chu was asked why the KMT was performing so poorly in current election polls. Mr. Chu attributed the flagging support for the KMT's to domestic policies, saying policies such as the capital gains tax attempted under President Ma were highly unpopular. So these kinds of policies should be fixed. But not cross-Strait relations. On cross-Straits, we did the right thing, and we should insist on that, Mr. Chu said. In short, Chu's statement was an acknowledgement that the KMT's recent domestic economic policies are the primary explanation for its waning support, and that the party should emphasize its approach to external economic relations, especially with China.

#### Tsai Ing-wen's Vision for a DPP-Led Economy

While the KMT campaign has focused on Taiwan's foreign (especially cross-Strait) economic relations, DPP presidential candidate Dr. Tsai has prioritized improving Taiwan's domestic economy while maintaining that expanding Taiwan's economic cooperation with other countries is an important component of her platform. In a June 2015 speech at the Center for Strategic and International Studies (CSIS), Dr. Tsai summed up the DPP's analysis of Taiwan's economic situation when she said:

For most Taiwanese, the state of our economy is a source of great distress as it has stagnated for some time and has lost momentum for growth. Globalization and China's rise as the world's factory have affected Taiwan's efficiency-driven model of economic growth. This has gradually resulted in a widening income gap, outsourcing of job opportunities, and stagnating salaries.<sup>46</sup>

The "efficiency-driven model" Dr. Tsai mentioned refers to Taiwan's economic strategy of linking itself to regional supply chains, primarily through China, and expanding exports to increase growth. This model brought about high growth rates in Taiwan in the 1990s and early 2000s and helped Taiwan earn the title of "Asian tiger." Many analysts in Taiwan now argue, however, that the long-term gains from this efficiency-driven model—essentially an export-led growth model—have been exhausted, and that the approach is no longer elevating Taiwan's overall economic competitiveness. <sup>47</sup> Instead, they argue, this model has made Taiwan too export-dependent and has locked Taiwan's economy into the middle of regional supply chains, with most manufacturing hosted in China or Southeast Asia and high-tech innovation happening in Western countries and Japan. <sup>48</sup> Moreover, the so-called "red supply chain," in which rising China-based technology companies dominate the full supply chain of high-tech products, risks infringing on Taiwan's traditional added value in established regional supply chains. <sup>49</sup>

As such, Dr. Tsai has advocated for shifting from an efficiency-driven model to what she calls an "innovation-driven" model. Dr. Tsai's plan, called a "New Model for Economic Development," features the following core elements: innovation, job creation, and equitable wealth distribution. To improve innovation, Dr. Tsai has advocated for increased international cooperation—including with the United States—in the information and communication technology (ICT) sector. Dr. Tsai has bolstered this plan with her support of legal reform in Taiwan that would encourage aspiring entrepreneurs and innovators to start new businesses and experiment with new technologies (see "Innovation and Entrepreneurship"). In the same vein, Dr. Tsai advocates for expanding Taiwan's social welfare benefits in proportion to economic growth. Under Dr. Tsai, the DPP has a plan to cooperate

<sup>\*</sup> On the domestic economy, Mr. Chu has criticized what he described as some of President Ma's "policy flip-flops" on issues such as the capital gains tax on stock transactions, the 12-year compulsory education system, and the energy price increase; but his campaign has generally stayed focused on Taiwan's foreign and cross-Strait economic relations. Central News Agency (Taiwan), "KMT's Chu Puts Forth String of Policy Initiatives," *Want China Times*, October 30, 2015.

http://www.wantchinatimes.com/news/content?id=20151030000037&cid=1101.

with local governments to improve social welfare services, to expand government investment in social housing, and to improve long-term senior care systems for Taiwan's aging population.<sup>52</sup>

While the DPP's focus in this election cycle appears to be on improving Taiwan's domestic economy, Dr. Tsai has emphasized that international trade would continue to be an important component of Taiwan's economic future under a DPP administration. To dispel perceptions that the DPP is protectionist—a reputation born from the DPP's opposition to expanding FTAs with China—Dr. Tsai and her DPP economic advisors have focused on the traderelated risks of overdependence on China's economy and the need for diversification of free trade partners (see Appendix I, "The DPP's Economic Leadership").<sup>53</sup>

Taiwan's two major political parties have begun to distinguish themselves to Taiwan voters primarily in their diverging economic policy visions, rather than the doctrinal dichotomy of unification versus independence. The KMT maintains that deeper economic integration with overseas markets—first and foremost China—continues to be a key element for Taiwan's future growth. The DPP, on the other hand, has argued that this model alone is no longer serving Taiwan's long-term economic interests and has left its economy vulnerable to and dependent on a single market. Instead, the DPP argues the government should refocus its attention on Taiwan's domestic economy, improving social safety nets and fostering local innovation to boost more sustainable growth. While many outside observers remain largely concerned with Taiwan's political status and its relations with China, it is these two opposing visions for Taiwan's economic future that most voters will be contemplating as they prepare to elect Taiwan's seventh president.

## **Taiwan's Domestic Economy**

With economic issues topping the list of voters' concerns in the upcoming election, an objective analysis of the health of Taiwan's domestic economy is helpful in parsing economic reality from political rhetoric. A review of several indicators across Taiwan's economy suggests that it is in a growth slump and increasingly vulnerable to external shocks, particularly from China. Although the trends in Taiwan's economy over the past 15 years do not appear to be the consequence of political transitions, future policy decisions will be important in remedying Taiwan's current economic woes and determining the future direction of its economy.

## **Growth Slump**

The most obvious sign of Taiwan's current economic stagnation is its slowing GDP growth rate. Figure 1 illustrates Taiwan's GDP and GDP growth across the Chen and Ma Administrations (2000–2015). Both presidents faced slowing growth caused by global recessions at the start of their terms, with the 2001 recession curbing growth under DPP President Chen and the 2008–2009 global financial crisis doing so under KMT President Ma. The years after each of these recessions show divergent recoveries, however. While growth remained steady between 4 and 6 percent under President Chen from 2002 to 2007, the Ma Administration saw only a temporary spike in GDP growth to over 10 percent following the global financial crisis, after which growth slowed to about 2 percent. <sup>54</sup> In 2015, some unofficial estimates have shown Taiwan's annual GDP growth at less than 1 percent. <sup>55</sup>

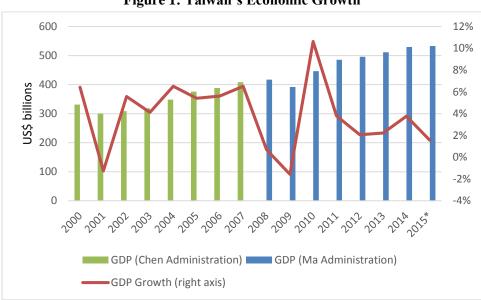


Figure 1: Taiwan's Economic Growth

Note: 2015 data are forecasts.

Source: Taiwan Directorate-General of Budget, Accounting and Statistics via CEIC database.

The divergent economic recoveries under presidents Chen and Ma are best explained by the changing contribution of exports to Taiwan's growth since its accession to the World Trade Organization (WTO) in 2001. As shown in Figure 2, the contribution of net exports to GDP has increased more than five-fold from less than 2 percent in 2000 to nearly 11 percent in 2014.<sup>56</sup> In the first half of 2015, net exports accounted for nearly 13 percent of Taiwan's GDP.<sup>57</sup> This increase was balanced against reductions in the contributions of government consumption and fixed asset investment. While private consumption continues to contribute to more than half of Taiwan's GDP, its share has also decreased slightly since 2000. This trend explains why many observers in Taiwan, including the American Chamber of Commerce (AmCham) in Taipei, are warning against an overreliance on trade as a source of economic growth.<sup>58</sup>

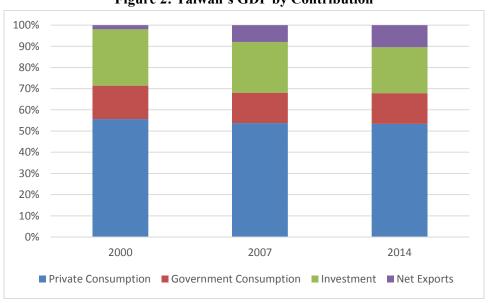


Figure 2: Taiwan's GDP by Contribution

Source: Taiwan Directorate-General of Budget, Accounting and Statistics via CEIC database.

Because China is Taiwan's largest trade partner, there is increasing unease in Taiwan about growth becoming overly dependent on trade with China. Figure 3 illustrates how Taiwan's industrial production\* has grown increasingly tied to its China-bound exports. In the years following its WTO accession, Taiwan's exports to China grew rapidly as Taiwan-based firms expanded manufacturing operations in China and established regional supply chains, especially in information technology (IT) products. By the time the Ma Administration rose to power in 2008, fluctuations in Taiwan's industrial production closely track exports to China.



Figure 3: Taiwan's Industrial Production

Note: 2015 data for 2015 are through September.

Source: Taiwan Ministry of Economic Affairs and Ministry of Finance via CEIC database.

In short, Taiwan's economic growth has become increasingly reliant on exports—specifically exports to China—over the past fifteen years. This trend appears to correspond to Taiwan's trade liberalization since acceding to the WTO in 2001 rather than the policies of the political party in power. Regardless, the reality of Taiwan's export-dependent growth model explains why Dr. Tsai has campaigned largely on a platform that promotes local sources of economic growth. Moreover, the increasingly important role of trade with China in Taiwan's export-oriented growth model may explain why many in Taiwan are calling for a diversification of export markets beyond China.

#### Labor Market

In addition to slowing growth, Taiwan's lackluster labor market performance is another important economic issue on the minds of Taiwan voters this election cycle. While overall employment levels have largely recovered under the Ma Administration after an unemployment spike due to the 2008–2009 financial crisis, employment opportunities are mostly in lower-skilled professions, leaving unemployment rates higher among Taiwan's more skilled workers. Coupled with real wages that have been largely stagnant throughout the Ma Administration, the lack of skilled jobs has helped to fuel opposition among Taiwan's youth toward the KMT-led government.<sup>59</sup>

Although the Ma Administration fell short of achieving its 2007 campaign pledge to reduce unemployment to below 3 percent, Taiwan's overall unemployment rate has steadily declined since it spiked during the 2008–2009 global financial crisis (see Figure 4). Moreover, the current unemployment rate of 3.74 percent is even lower than in the years prior to the crisis, during the second term of the Chen Administration. Taiwan's unemployment rate is now on par with South Korea's, after having consistently higher unemployment for the past 14 years (see Figure 4).

<sup>\*</sup> Industrial production is quantified using the industrial production index, which measures outputs of the industrial sector of the economy, including manufacturing, mining, and utilities.

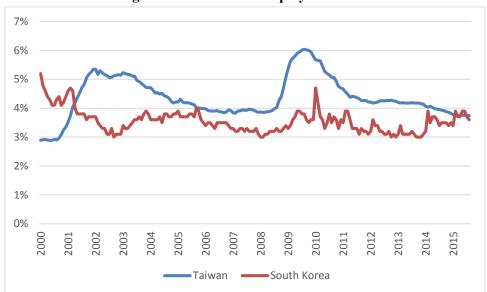


Figure 4: Taiwan's Unemployment Rate

Source: Taiwan Directorate-General of Budget, Accounting and Statistics and Statistics Korea via CEIC database.

Although overall unemployment in Taiwan is improving, unemployment rates among Taiwan's workers have diverged depending on skill level. As shown in Figure 5, Taiwan's most educated workers—those with a degree from a junior college,\* university, or higher—now face the highest risk of unemployment, a trend that emerged at the start of President Ma's second term in 2012. Although access to higher education has expanded in Taiwan, academic research skills often lack practical application in the companies and industry in Taiwan, leading to a gap between the number of academic research positions available and the supply of highly educated workers. <sup>60</sup> Meanwhile, those with the lowest education levels—junior high school and below—have fared better, with an unemployment rate below 3 percent. More detailed data on Taiwan's skilled labor force reveal those with university and graduate degrees register even higher unemployment rates (between 5 and 6 percent) compared with those who have only a junior college degree (about 3 percent). This might explain why some of the loudest voices of opposition to the current KMT-led government, such as those of the 2014 Sunflower Movement, have been from university students and recent graduates.

U.S.-China Economic and Security Review Commission

<sup>\*</sup> Junior colleges provide technical and vocational education, including industry, commerce, healthcare and nursing, marine technology, languages, home economics, tourism, and hospitality.

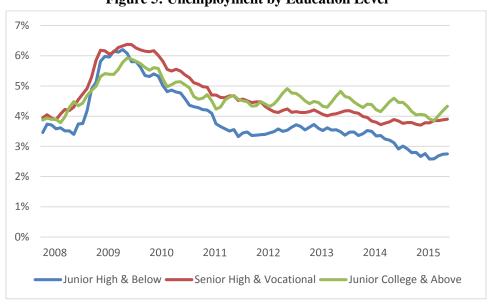


Figure 5: Unemployment by Education Level

Source: Taiwan Directorate-General of Budget, Accounting and Statistics via CEIC database.

In addition to unemployment, stagnant wages have been another source of criticism against the Ma Administration. As shown by the trend line in Figure 6, real monthly wages in Taiwan have barely risen during the eight years of the Ma Administration. Unsurprisingly, real wages fell following the 2008–2009 global financial crisis, but failed to recover to pre-crisis levels in the subsequent years. A recent uptick in real monthly wages shows some promise for incremental improvement, but is unlikely to alleviate frustration that wages are not increasing in proportion with prices.

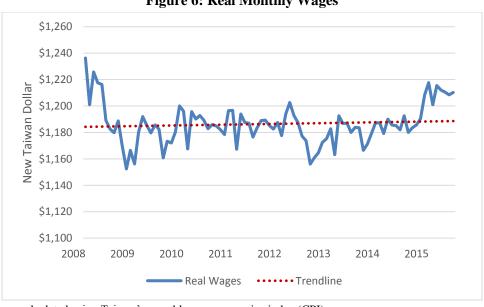


Figure 6: Real Monthly Wages

Note: Real wages were calculated using Taiwan's monthly consumer price index (CPI). Source: Taiwan Directorate-General of Budget, Accounting and Statistics via CEIC database.

To address this problem, both parties have vowed to increase wages for Taiwan workers. Dr. Tsai has promised to increase the minimum wage while also improving working conditions, most notably pledging to reduce regular working hours from 84 hours every two weeks to 40 hours per week. Dr. Tsai has also argued that the current minimum wage in Taiwan, which is set at about \$600 per month, is "not adequate for workers to meet their basic needs." Former KMT presidential candidate Hung Hsiu-chu proposed in August 2015 a policy of tax-deductible wage increases, under which small and medium-sized companies could apply for tax deductions up to 200 percent of the value of wage increases for entry-level employees.<sup>62</sup> However, since Mr. Chu replaced Ms. Hung as the KMT's candidate, he has not yet endorsed Ms. Hung's proposal or proposed an alternative wage policy.

#### **Prices and Cost of Living**

In general, prices in Taiwan continue to rise moderately, though inflation in 2015 remained relatively low. As of the third quarter of 2015, inflation of Taiwan's consumer price index (CPI)—a measurement of price changes in household-purchased consumer goods and services—was only slightly above zero and was expected to remain around that rate for the remainder of the year. Analysts attribute this primarily to weakened domestic demand. Moreover, in light of wage stagnation, Taiwan's consumers' sensitivity to price increases has pressured domestic retailers and producers to cut prices in order to increase sales volumes. A Taiwan's CPI suggests it remains a relatively affordable place to live, ranking 54th highest out of 119 countries in 2015 by cost of living. According to the ranking by Numbeo, a database of worldwide living conditions, Taiwan's cost of living is lower than that of South Korea, Japan, and Hong Kong, but higher than that in China and Thailand.

Despite downward pressure on prices overall, real estate prices in Taiwan have been rising at a much faster rate than incomes, which, as noted previously, have been largely stagnant. As shown in Figure 7, the ratio of housing prices to income has risen steadily over the past decade, nearly doubling since 2002. Under the Ma Administration, since 2008, the ratio increased by about one-third from 5.76 to 8.46.<sup>67</sup> In Taipei, the housing price to income ratio is 15, currently the highest of any city in the world, though analysts attribute this to stagnant incomes rather than solely increasing prices.<sup>68</sup> In 2015, due to rising prices relative to income, housing sales have slowed considerably: In Taipei, only 1.9 percent of households bought a home in the first three quarters of 2015.<sup>69</sup> Some observers forecast that slowing sales could trigger price cuts, but thus far construction companies and real estate agencies have been reluctant to lower prices and instead have curbed new construction to limit inventories.<sup>70</sup>

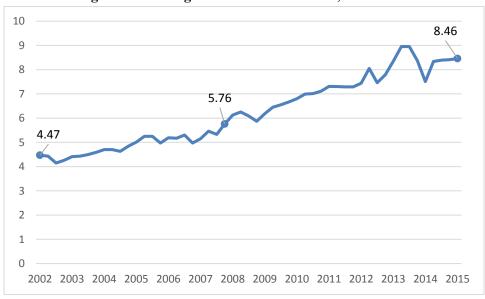


Figure 7: Housing Prices to Income Ratio, 2002–2015

Source: Taiwan Ministry of Interior via CEIC database.

Addressing the rising cost of housing in Taiwan has been an ongoing challenge for policymakers. Dr. Tsai has advocated for a new social housing policy that would include the construction of 200,000 new affordable housing units and government-assisted management of rental properties.<sup>71</sup> Under the latter policy, the Taiwan government would assist property owners who are unwilling or unable to manage their empty properties as rentals by providing the service on their behalf. Dr. Tsai's recommendation has faced criticism from the KMT, which has called her plan unrealistically expensive.<sup>72</sup> Mr. Chu supports the creation of 200,000 affordable housing units, but has proposed they be created by turning existing unused properties into social housing units rather than constructing new units.<sup>73</sup>

#### **Public Debt**

Public debt is another area of debate in Taiwan. Reports from the Ministry of Finance indicate that Taiwan's rising debt-to-GDP ratio—up to 37 percent in 2014 from 16 percent in 1996—could eventually put Taiwan at risk of a sovereign debt crisis if underlying problems are not addressed soon.<sup>74</sup> The cost of the government's future financial obligations, including pensions, labor insurance program debts, and other welfare programs is expected to increase public debt to 160 percent of GDP in the next 30 years.<sup>75</sup> Based on current debt levels, however, the situation appears generally stable, at least for the short term. Figure 8 depicts Taiwan's public debt-to-GDP ratio in a regional context. Although the public debt-to-GDP ratio is increasing, the pace and level are on par with similarly sized Asian economies, and the ratio has even declined slightly since 2012. Taiwan's government budget deficit remains low at 2.1 percent of GDP, comparable to South Korea's (1.8 percent) and significantly lower than Japan's (7.7 percent).<sup>76</sup>

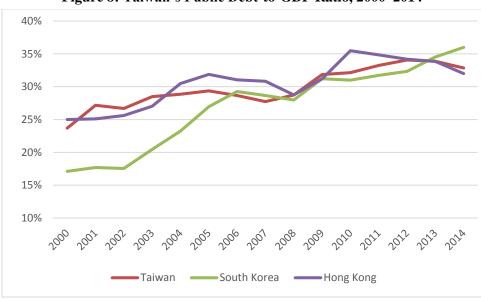


Figure 8: Taiwan's Public Debt-to-GDP Ratio, 2000-2014

Source: Taiwan Ministry of Finance and Directorate-General of Budget, Accounting and Statistics via CEIC database; Tradingeconomics.com.

Although Taiwan's public debt may be a long-term risk, supporting Taiwan's aging population, including the rising cost of retirement benefits and Taiwan's unsustainable pension fund, is a more immediate problem. Taiwan's population is aging rapidly, as illustrated by Taiwan's aging index.\* As this trend worsens, Taiwan's retirement costs will continue to rise while the working population shrinks, thereby increasing Taiwan's public debt-to-GDP ratio over time (see Figure 9).

14

<sup>\*</sup> The aging index is calculated as the number of persons aged 60 or older per one hundred persons under age 15.



Figure 9: Retirement Benefits and Taiwan's Aging Population, 2000-2014

Source: Taiwan Ministry of Finance and Directorate-General of Budget, Accounting and Statistics via CEIC database.

Because of the lingering threat of rising public debt, the DPP and KMT have been debating reforms to Taiwan's pension system this election cycle. In 2015, both parties and Taiwan's Examination Yuan, which is responsible for civil servant affairs, have recommended reforms to the pension fund, but no concrete steps have been taken. The Examination Yuan's reform plan includes lowering retired civil servants' income replacement rate and adjusting the retirement pension's calculation formula, while also raising the age at which one qualifies for a retirement pension.<sup>77</sup> Dr. Tsai has recommended pursuing pension reform "in a gradual manner," beginning with simplifying payment rules, then delaying when pension payments begin for retirees, and finally changing income substitution rates.<sup>78</sup> Dr. Tsai has also called for the formation of a National Pension Reform Committee of experts and government and private sector representatives to formulate a reform plan.<sup>79</sup> Mr. Chu, meanwhile, criticized the DPP's suggestion for failing to address the continued financial instability of the pension system. To date, however, the KMT has not offered its own substantive plan for pension reform.<sup>80</sup>

## Taiwan's Energy Dilemma

As a small island economy, Taiwan is highly dependent on imported energy sources to fuel its export-oriented industries. Currently, 98 percent of Taiwan's energy consumption is imported, the vast majority of which is comprised of fossil fuels from the Middle East. 81 Moreover, a highly state-controlled energy sector keeps prices artificially low, making privatization a political obstacle. In addition, the few domestic sources of energy available—nuclear, coal, and renewables—are either too controversial or too expensive. This has left Taiwan's policymakers with a challenging dilemma: curbing Taiwan's dependence on energy imports while safeguarding the environment and preventing price shocks.

Nuclear power is by far the most politically sensitive energy issue in Taiwan. Taiwan currently has three active nuclear power stations, all of which are scheduled to be decommissioned between 2018 and 2025. Taiwan's state-owned electricity provider, Taipower, financed the construction of a fourth nuclear power station, the Lungmen Nuclear Power Plant, which was set to become operational by 2015. In 2014, however, Taiwan's government voted to halt construction of the Lungmen plant amid protests and safety concerns following the 2011 Fukushima nuclear disaster in Japan. If the plant remains unfinished, it will result in a financial loss of about \$9.3 billion for Taipower, which is already heavily in debt due to subsidization of energy prices.

The nuclear power debate in Taiwan has historical roots dating back to the 1970s, when Taiwan—then under a KMT one-party authoritarian government—embraced nuclear power amid the global oil crisis. The anti-nuclear movement in Taiwan coincided with the birth of the DPP as a pro-democracy movement, with the ruling KMT leading Taiwan's expansion into nuclear production. When the DPP first rose to power under former President Chen

Shui-bian, the party made significant but ultimately unsuccessful efforts to halt construction on the Lungmen nuclear station.<sup>85</sup> Although public opposition to nuclear power has spread since 2011 and both parties have now expressed support for a nuclear-free Taiwan, the historical legacies of an anti-nuclear DPP and pro-nuclear KMT still linger.

For example, Dr. Tsai has been more vocal in her opposition to nuclear power than have her KMT counterparts. Dr. Tsai has unambiguously advocated for permanent closure of the Lungmen plant and opposes extending the operational periods of the three active nuclear stations. For the Lungmen plant and opposes extending the operational periods of the three active nuclear stations. Tsai promotes replacing nuclear power with renewable energy sources, such as solar and wind. Meanwhile, Mr. Chu has voiced his support for a nuclear-free Taiwan, but has also expressed doubt that Taiwan can phase out nuclear production by 2025, when the currently operational nuclear stations are set to be decommissioned.

In addition to their differences on nuclear power, the two parties have divergent approaches to reforming the energy sector more broadly. A DPP-led government may be more inclined to expedite reform of Taiwan's two state-owned power utilities companies (Taipower and CPC Corporation). Dr. Tsai has described Taipower, for example, as needing to reduce inefficiencies and has accused it of relying on "state coffers" for its nuclear energy production. The DPP is also considering expanding the role of the private sector in energy production and implementing demand-side policies to reduce energy consumption. Meanwhile, the KMT-led government has supported partial reform of Taipower by approving amendments to Taiwan's Electricity Act in July 2015; however, as the relatively pro-business party, the KMT has stopped short of advocating for energy sector privatization as this would likely raise domestic energy prices, thereby harming private industry. Instead, Mr. Chu has advocated for subsidizing corporations' procurement of energy-efficient equipment and imposing punitive energy prices on businesses that consume too much energy.

### **Innovation and Entrepreneurship**

Although Taiwan is an innovative and technology-intensive economy, its competiveness in innovation-driven sectors is declining. Taiwan ranks first globally for patent activity,\* and is the tenth most innovative economy in the world, according to Bloomberg rankings. In addition to hosting major technology firms such as Foxconn and HTC, Taiwan is also one of the world's biggest semiconductor suppliers. Despite these impressive achievements, policymakers across Taiwan's political spectrum are attributing its stagnant growth and wages in part to a slump in innovation, a topic that has become ubiquitous on both political parties' campaign trails.

Taiwan's traditional advantage in innovation refers primarily to the innovative capacity of its large technology companies. In this respect, Taiwan has performed well over the past two decades, driving its high level of patent activity. Taiwan-based companies such as HTC won global renown in the 1990s and early 2000s by doing highly efficient contract work for brands such as Apple, Dell, and Toshiba.<sup>94</sup> The spillover effects of producing foreign technology helped some Taiwan contractors to innovate on their own; for example, HTC develops globally competitive smartphones and Asustek Computer (Asus) produces popular tablet computers. 95 In recent years, however, corporate executives have grown concerned that their firms have not been as adept at innovating as other global competitors. According to an official at the Taiwan Ministry of Economic Affairs, the legacy of Taiwan's efficiency model of doing contract work for foreign firms is now a burden insofar as Taiwan's technology experts are more adept at advancing cost-effective ideas than truly creative ones. <sup>96</sup> For example, 90 percent of the world's laptop sales come from five manufacturing companies in Taiwan—Quanta Computer, Compal Electronics, Pegatron, Wistron, and Inventec. However, increased competition from manufacturers in China and Vietnam has decreased the profits of these companies by 50 percent over the last decade. 97 Without new innovations to improve the quality and capabilities of their products, Taiwan's manufacturers are quickly losing ground in the global market: In September 2015, HTC, a leading global smartphone manufacturer, cut 15 percent of its staff and was dropped from the Taiwan stock exchange's top 50 companies index after competition from lower-cost factories in Asia led to a decline in profits. 98 Some analysts have said that the problem lies in Taiwan's corporate culture, "where the drive to invent and market new products is not sufficiently prized."99 Firms are banking on increased research and development (R&D) as a remedy to their innovation slumps: overall R&D expenditures more than doubled in

<sup>\*</sup> Patent activity represents resident patent filings per one million residents and per \$1 million of R&D spent, as well as patents granted as a percentage of the world total.

Taiwan from 2000 to 2014, and the share of R&D expenditures by businesses increased from 64 percent to 77 percent over the same period. 100

Aside from declining innovation in established corporations, Taiwan's lack of entrepreneurship and risk-taking also contributes to the innovation slump. 101 Because of Taiwan's slowing economic growth and the shift toward Chinese manufacturers, young people in Taiwan are choosing to pursue civil service jobs instead of riskier careers in innovation-driven industries. 102 However, data from the Global Entrepreneurship Monitor (GEM), the world's largest global study of entrepreneurship, suggests that although early-stage entrepreneurial activity remains low, perceptions in Taiwan about entrepreneurship as a career are changing. As shown in Table 1, the GEM's indicator for Taiwan's total early-stage entrepreneurial activity was only 8.5 percent in 2014; although it has marginally increased since 2010, it is lower than some regional neighbors, such as Singapore (10.9 percent) and China (15.5 percent). 103 Similarly, the rate of established business ownership, which includes new and established businesses, has been increasing and is higher than Singapore (3 percent), South Korea (9 percent), and China (11 percent).<sup>104</sup> Nevertheless, perceptions about and aspirations toward entrepreneurship are high in Taiwan and increasing. More than 25 percent of those surveyed\* said they intend to start a business within three years, and more than 75 percent believed entrepreneurship is perceived as a desirable career in Taiwan. In addition, the fear of failure among aspiring entrepreneurs, a problem cited by Dr. Tsai as limiting innovation in Taiwan, declined from 44 percent in 2010 to 37.4 percent in 2014. 105 These indicators confirm that, while entrepreneurship remains comparatively low in Taiwan, the motivation and desire for innovating is increasing.

**Table 1: Taiwan's Entrepreneurship Indicators (2010–2014)** 

Indicator	Description	2010	2012	2014
Total Early-Stage Entrepreneurial Activity	Percentage of population who are either a nascent entrepreneur or owner-manager of a new business	8.4%	7.5%	8.5%
Established Business Ownership Rate	Percentage of population who own a business	7.2%	10.4%	12.2%
Entrepreneurial Intention	Percentage of population who intend to start a business within three years	25.1%	25.5%	25.6%
Entrepreneurship as Desirable Career	Percentage of population who believe most people in Taiwan consider starting a business is a desirable career choice	68%	70%	75.2%
Fear of Failure	Percentage of population who indicate that fear of failure would prevent them from setting up a business	44%	38%	37.4%
Perceived Opportunities	Percentage of population who see good opportunities to start a firm in the area where they live	30%	39%	33.5%

Source: Global Entrepreneurship Monitor, 2015.

To bring about more innovation through entrepreneurship, the government and both political parties are seeking policy solutions such as supporting startup incubators and providing easier access to venture capital. <sup>106</sup> The Innovation and Entrepreneurship Policy Board, a cabinet-level body in Taiwan, is launching initiatives to encourage small and medium-sized enterprises and Taiwan's youth to pursue innovative investments. Some of their efforts include the establishment of an innovation center in Silicon Valley to promote talent development, a program called HeadStart Taiwan to help attract venture capital, and the Taiwan Silicon Valley Technology Fund, which will help finance startups by Taiwan citizens. <sup>107</sup>

Similar policy initiatives will likely continue, regardless of which party succeeds in the upcoming elections. Given that the efforts of the Innovation and Entrepreneurship Policy Board were launched by President Ma, a Chu Administration would likely continue them. In an October 2015 speech, Mr. Chu pledged he would "create an investment environment governed by simple regulations, in which young people will be given freedom and the

<sup>\*</sup> The survey was conducted by National Chengchi University. The sample size for the survey was not indicated.

chance to innovate."<sup>108</sup> Likewise, Dr. Tsai and her economic advisors have spoken extensively about innovation (see "Tsai Ing-wen's Vision for a DPP-Led Economy") and the importance of supporting small businesses, startups, and youth on the campaign trail. One DPP advisor to Dr. Tsai said, "The problem of wages with the young generation is that they all join big companies doing this [contract] work, they work long hours for low pay, and their creativity is wasted in that industrial structure."<sup>109</sup> There seems to be a growing bipartisan consensus that Taiwan's future innovative capacity lies primarily in its ability to empower educated youth and small businesses to take on greater risk to innovate.

## Taiwan in the Global Economy

Although domestic economic issues are expected to top the list of voters' concerns in the election, Taiwan's economic relations with other countries continue to be an important talking point for both the KMT and DPP camps. Although it is a WTO member and largely open economy, Taiwan's record of foreign exchange intervention, stagnant inbound foreign direct investment (FDI), and exclusion from bilateral and regional FTAs suggest there is space for Taiwan to be more integrated with global markets (see Table 2 and Appendix II, "Select Taiwan Trade Partners"). However, as Taiwan pursues further liberalization in trade and finance, it will need to weigh the economic benefits against the risks of vulnerability to external shocks, particularly from China.

Table 2: Taiwan's Top Trading Partners 2015 (US\$ billions)

Country	Total Trade	Exports	Imports
China	\$86.7	\$53.9	\$32.7
United States	\$45.3	\$25.9	\$19.3
Japan	\$43.6	\$14.4	\$29.2
Hong Kong	\$29.6	\$28.4	\$1.1
South Korea	\$19.4	\$9.6	\$9.8
Singapore	\$18.8	\$13.4	\$5.5

*Note:* All data are for the first nine months of 2015.

Source: Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.

In international finance, Taiwan maintains a managed floating exchange rate regime, intervenes regularly in the foreign exchange market, and does not disclose its reserve holdings and intervention. According to the U.S. Treasury Department, Taiwan intervenes primarily as a means of resisting appreciation of its currency, the New Taiwan Dollar (NTD). Similar to many emerging economies in Asia, Taiwan intervened heavily during the 2008–2009 global financial crisis to slow the NTD's appreciation (see Figure 10). From 2012 to 2015, the NTD steadily depreciated in value, offsetting the need to intervene and resulting in low or negative growth in Taiwan's foreign exchange reserves (see Figure 10). Taiwan's foreign exchange intervention appears to be immune to political transition: Taiwan's foreign reserves increased by about \$160 billion under both presidents Chen and Ma's eight-year terms in office. Due to Taiwan's large current account surplus, the U.S. Treasury argues that Taiwan authorities should not resist currency appreciation through intervention and should increase transparency of reserve holdings. 111

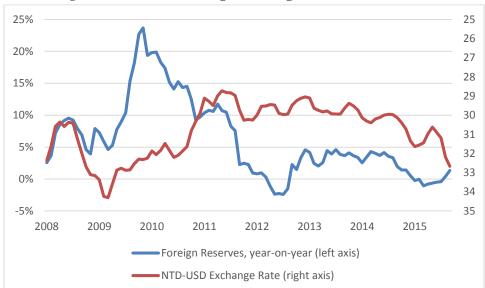


Figure 10: Taiwan's Foreign Exchange Reserves, 2008–2015

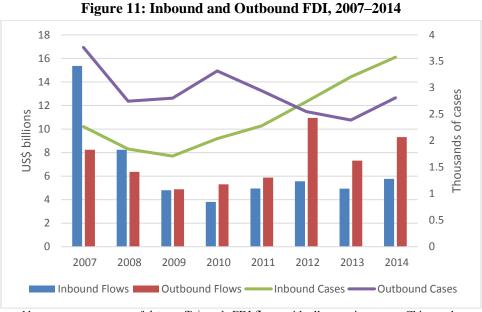
Source: Central Bank of the Republic of China via CEIC database.

#### Foreign Investment in Taiwan: A Hollowing Out?

When Taiwan-based companies shifted much of their manufacturing from Taiwan to China and Southeast Asia in the late 1990s and early 2000s, many expressed concern that Taiwan's economy faced the threat of a "hollowing out," or the flow of manufacturing production and jobs out of Taiwan. In recent years, a rise in FDI outflows against a backdrop of stagnant inflows has brought about renewed worries of the "hollowing out" effect (see Figure 11). Notably, in 2014, Taiwan received the smallest amount of inbound FDI across 12 Asian economies. In addition, since 2009, Taiwan's outbound FDI flows have outpaced inbound flows at an increasing rate. Although annual inbound flows from all foreign countries (excluding China) increased by about \$2 billion from 2010 to 2014, outbound flows nearly doubled from about \$5 billion to \$9 billion over this same period (see Figure 11).

U.S.-China Economic and Security Review Commission

The other eleven economies included China, Hong Kong, Singapore, India, Indonesia, South Korea, Thailand, Malaysia, Japan, Vietnam, and the Philippines.



Note: The data presented here are an aggregate of data on Taiwan's FDI flows with all countries except China and cross-Strait FDI data. Source: Taiwan Ministry of Economics and Mainland Affairs Council via CEIC database.

Moreover, the size of individual investments into Taiwan is decreasing. As shown in Figure 11, the number of cases of inbound FDI has risen and surpassed the number of outbound FDI cases, suggesting individual foreign investment projects in Taiwan are smaller in value than the Taiwan investments established overseas. This may be a result of the decrease in investment projects in Taiwan by major international private equity (PE) firms. According to the American Chamber of Commerce in Taipei (AmCham Taipei), Taiwan's opaque investment authorization process has led to a dearth of PE-funded investments over the past six years amid investors' uncertainty over what projects will be approved. This is in contrast to elsewhere in the region where PE transactions have been responsible for massive amounts of investment.<sup>114</sup> In addition, domestic capital continues to flow abroad at high rates, which the U.S. Treasury attributes to recent policy changes, such as amendments passed in 2015 making it easier for banks and insurance companies to acquire assets abroad. Capital outflows are so high that Taiwan's net international investment asset position—the stock of its foreign assets less its foreign liabilities—is 180 percent of GDP.<sup>115</sup>

Despite its stagnant inbound FDI, Taiwan ranks among the easiest economies in the world in which to do business. For the past two years, the World Bank ranked Taiwan 11th globally in its "Ease of Doing Business" ranking. The report tracks a number of reforms since 2008 that have improved the business climate in Taiwan, including a simplified process for obtaining construction permits (2013) and an electronic payment system for certain taxes (2015). Although Taiwan's overall ranking remains strong, its position declined across six of the ten indicators\* in the 2016 report. Taiwan's worst-performing indicator was "trading across borders"; Taiwan ranks 65th globally, likely a result of its exclusion from regional and bilateral FTAs. Taiwan.

Moreover, foreign businesses complain about the regulatory environment in Taiwan. In its 2015 white paper on Taiwan, AmCham Taipei claimed "inadequate transparency in the regulatory process is the root cause" of its concerns. <sup>119</sup> In its 2015 Investment Climate Statement on Taiwan, the U.S. Department of State also underscored stalled progress on the privatization of state-owned enterprises (SOEs) and foreign ownership caps in the telecommunication, television, and transportation sectors as weaknesses in Taiwan's investment climate. <sup>120</sup> The uncertainty of Taiwan's energy supply (see "Taiwan's Energy Dilemma") is also an issue of concern among investors.

Taiwan is currently reviewing a range of potential reforms that will help it meet the qualifications for new regional trading blocs such as the U.S.-backed Trans-Pacific Partnership (TPP). According to the State Department,

<sup>\*</sup> The ten indicators include starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency.

Taiwan's ability to implement those reforms will be the "primary determinants of the quality of Taiwan's investment environment going forward." AmCham Taipei has also said that among other regulatory reforms, Taiwan's participation in FTAs, namely the TPP, will be critical for its ability to increase FDI. 22 Given Taiwan's declining ranking on ease of starting new businesses and obtaining credit, the next administration's ability to improve these shortcomings will also be key to improving Taiwan's overall investment climate and negating the threat of an investment "hollowing out."

Taiwan continues to register a very large current account surplus, though exports have been steadily declining in 2015. In the first half of 2015, Taiwan's current account surplus accounted for 14.5 percent of GDP, an increase of 2.1 percent year-on-year. However, October 2015 saw an 11 percent drop in exports year-on-year, the seventh consecutive month of declining exports. It Given that nearly 40 percent of Taiwan's exports are bound for China, the decline is primarily attributed to China's economic slowdown. Taiwan's total trade with China (including Hong Kong) as a share of overall trade doubled from about 15 percent in 2000 to about 30 percent since 2010 (see Figure 12).



Figure 12: Share of Taiwan's Trade with China and the United States, 1999-2015

Note: 2015 data is based on trade only between January and September 2015.

Source: Taiwan Ministry of Finance via CEIC database.

The combination of Taiwan's export-led growth model with this disproportionately large share of trade with China has led to an environment in which Taiwan's growth has become directly dependent on trade with China. Both political parties are calling for a diversification of export markets in light of the high degree of vulnerability of Taiwan's economy to fluctuations in China's economy. In addition to leveraging other sources of growth beyond exports to China, such as consumption and fixed asset investment, diversifying Taiwan's export markets will be critical to reducing its dependence on China.

To expand Taiwan's external economic relations, Mr. Chu has pledged that, if elected, he will strive for participation in more FTAs. In October 2015, Mr. Chu said, "Taiwan is an island economy, and the most important challenge for us is to accede to the Mainland-led RCEP [Regional Comprehensive Economic Partnership\*], and the U.S.-backed TPP." Mr. Chu has also said he intends to turn Taiwan into a "free-economy island" through deeper trade liberalization as part of his "three bows, four arrows" strategy, which seeks to build Taiwan's technological strength and upgrade its industrial sector to increase its global competitiveness in high-tech industries. Mr. Chu warned that Taiwan's exclusion from FTAs risked isolating the country in the same way as North Korea. Selven that China has stipulated concluding all ECFA-related agreements as a precondition for Taiwan's participation in RCEP,

<sup>\*</sup> RCEP is a prospective FTA initiated by the Association of Southeast Asian Nations (ASEAN) and includes China as a key member.

it is likely a Chu Administration would follow President Ma's policies of prioritizing cross-Strait trade liberalization.

Dr. Tsai has also stressed the importance of diversifying Taiwan's export markets, but unlike Mr. Chu, prioritizes U.S.-Taiwan economic liberalization over cross-Strait trade. Specifically, Dr. Tsai has said there is "an urgent need for Taiwan to participate in the TPP," setting up a special task force to explore the policy reforms Taiwan would need to implement in order to gain TPP admission.\* Given Dr. Tsai's desire to increase U.S.-Taiwan trade and investment, progress toward a U.S.-Taiwan Trade and Investment Framework Agreement (TIFA) may proceed more quickly than ECFA negotiations under a DPP administration, though progress hinges on Taiwan market access for U.S. pork exports, an ongoing obstacle to finalizing the TIFA. The DPP has stated it will not seek to overturn existing agreements under ECFA, but "will attempt to improve their implementation," and that future agreements would be contingent on the cross-Strait supervisory bill in the Legislative Yuan becoming law. As such, it is unlikely the next phase of ECFA, particularly the CSSTA, would progress as rapidly under a DPP-led government as the early harvest agreement did under President Ma.

#### **Cross-Strait Economic Relations**

A closer examination of the rising flows of people, goods, and investment across the Taiwan Strait further illustrates Taiwan's increasing economic dependence on China. China is Taiwan's largest trade partner and leading source of FDI, while Taiwan accounts for only 4 percent of China's total trade. As the volume of cross-Strait trade and investment increases, worries over Taiwan's vulnerability to Chinese influence and economic coercion are escalating. These fears, the same that drove protestors to occupy the Legislative Yuan in the 2014 Sunflower Movement, have shaped both major political parties' economic platforms.

Cross-Strait trade and investment, which rose significantly under President Chen, has continued—albeit more modestly—to increase under President Ma, despite the global financial crisis and China's economic slowdown.† In part, the dramatic increase in cross-Strait trade and investment can be traced back to 2001, when Taiwan and China each joined the WTO and underwent substantial economic liberalization; the most significant cross-Strait economic gains occurred from 2000 to 2007, with annual trade increasing from \$10 billion to \$90 billion (see Figure 13). In the first nine months of 2015, cross-Strait trade made up over 22 percent of Taiwan's global trade. 132

<sup>†</sup> From 2001 to 2014, cross-Strait trade increased more than ten-fold, while Taiwan's FDI into China increased by nearly 300 percent. Bureau of Foreign Trade (Taiwan). *Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/*.

<sup>\*</sup> Dr. Tsai has previously stated her support for Taiwan joining RCEP, of which China is a negotiating partner; however, her campaign speeches in the final months before the election have focused primarily on TPP participation. This might be a result of China's stipulation that all ECFA agreements be concluded before Taiwan can be considered for RCEP. KMT candidate Mr. Chu has criticized the DPP for advocating Taiwan's participation in the TPP, but not RCEP. Tsai Ing-wen, "Our Role in Maintaining Regional Stability," Democratic Progressive Party, July 1, 2014. http://english.dpp.org.tw/chair-tsai-ing-wen-our-role-in-maintaining-regional-stability/.



Figure 13: Cross-Strait Trade, 2000-2015

Note: Data for 2015 are through September.

Source: Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.

Taiwan's exports to China account for a majority of cross-Strait trade, with China ranking as Taiwan's largest export market since 2003. During the Chen Administration (2000–2008), the rapid increase of cross-Strait trade was largely the result of increased exports to the Mainland, with Taiwan's annual exports to China increasing from \$4.2 billion to \$62.4 billion.\*133 In recent years, Taiwan's trade surplus with China has remained relatively stable—it was \$34 billion in 2014, the same as in 2007—although total trade has continued to see moderate growth. 134 Cross-Strait trade in services, particularly tourism, has seen notable increases since 2008, when China began granting permission for cross-Strait travel; over four million Chinese residents visited Taiwan in 2014, compared to just 280,000 in 2008, while 5.4 million Taiwan citizens visited China in 2014, up from 4.4 million in 2008.

#### Taiwan's Declining Semiconductor Sector

Taiwan's semiconductor industry, a hallmark of its export-oriented economy, is facing a growing threat of decline as Chinese companies and the so-called "red supply chain" begin to dominate regional information and communication technology (ICT) manufacturing. Cross-Strait trade is largely formed by regional supply chains in the ICT sector, particularly semiconductor trade. China's total semiconductor imports made up 56.6 percent of global semiconductor imports in 2014, an increase from 44 percent in 2013. Meanwhile, Taiwan is the world's leading semiconductor manufacturer, exporting a total of more than \$200 billion worth of semiconductor products globally in the first nine months of 2015. However, Chinese manufacturers are increasingly sourcing from Chinabased suppliers and placing fewer orders from Taiwan firms. As a result, Taiwan's semiconductor exports have declined significantly; in the first nine months of 2015, exports of microchips, semiconductors, and printed circuit boards to China declined 4.5 percent, 18.9 percent, and 3.3 percent, respectively, from the same period in 2014. In April 2015, Taiwan's semiconductor export orders declined 4 percent year-on-year, the first drop since July 2013.

China views semiconductors as "crucial for national security" and has pledged billions of dollars in investment in the sector. <sup>140</sup> To improve its domestic semiconductor industry, China has begun buying stakes in Taiwan's semiconductor companies. In October 2015, China's state-owned Tsinghua Unigroup Ltd. bought a \$600 million stake in Taiwan's Powertech Technology Inc., a microchip packaging and testing company. That same month,

<sup>\*</sup> For more analysis of cross-Strait trade, see the U.S.-China Economic and Security Review Commission's 2015 *Annual Report to Congress*, November 2015, 498-500.

<sup>†</sup> In the first nine months of 2015, three of Taiwan's top five exports to China were semiconductor-related, including microchips (\$10.8 billion), semiconductors (\$6.5 billion), and printed circuit boards (\$1.7 billion). Bureau of Foreign Trade (Taiwan). *Trade Statistics*. http://cus93.trade.gov.tw/ENGLISH/FSCE/.

Tsinghua Unigroup hired the former head of Inotera Memories Inc., one of Taiwan's largest memory chip makers, to head up a joint venture between Micron and Taiwan's Nanya Technology Corp. <sup>141</sup> As China works to bolster its semiconductor industry, it will continue producing parts and components at lower prices to replace those made by Taiwan firms, further increasing competition and driving down Taiwan companies' profits. <sup>142</sup> Rather than relying on Taiwan's established semiconductor suppliers, China is slowly taking control of the global semiconductor business, threatening the survival of this industry in Taiwan, where it has long been a key competitive advantage. <sup>143</sup> Seeking Chinese tax advantages and looking to reduce costs, Taiwan Semiconductor Manufacturing Company (TSMC) announced in December 2015 it will set up a wholly Taiwan-owned manufacturing plant in China. <sup>144</sup> TSMC is the first company to take advantage of a September rule change that relaxed requirements mandating investments in China be done as a joint venture with a Chinese company. <sup>145</sup>

China is also Taiwan's top destination for FDI, accounting for 45.5 percent of Taiwan's total outbound FDI (see Figure 14). According to official Taiwan data, Taiwan FDI into China in the first nine months of 2015 was approximately \$7.3 billion, a decrease of 4.4 percent from the same period in 2014. However, analysts believe this amount grossly understates the actual scale of investment. According to a 2011 study, many Taiwan firms use third-party companies—mostly registered in Hong Kong—to invest in China, which creates a discrepancy between the stated level of cross-Strait investment and Taiwan's actual level of investment in China. Official Taiwan FDI flows had been declining since 2010, until seeing a 13 percent increase in 2014 and further increases in the first nine months of 2015 due to new Taiwan FDI in China's electronic parts manufacturing and computer manufacturing sectors.

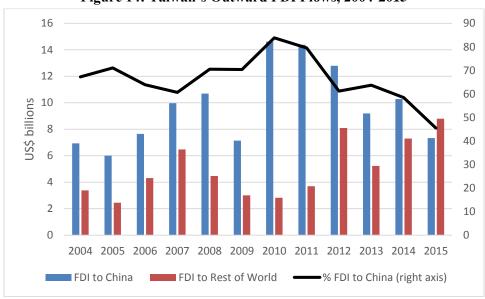


Figure 14: Taiwan's Outward FDI Flows, 2004-2015

Note: Data for 2015 are through September.

Source: Taiwan Ministry of Economics and Mainland Affairs Council via CEIC database.

The creation of the Fujian Free Trade Zone, approved by China's State Council at the end of 2014, will streamline trade from Taiwan into China. Under the laws of the zone, there will be no pre-entry customs inspections for imported goods from Taiwan, increasing the efficiency of trade for goods like health products, cosmetics, medical devices, and traditional Chinese medicine. The Chinese zone will also fully open its creative and medical industries for investors in Taiwan, promoting increased FDI into China. Because the trade and investment will be flowing exclusively into China, however, the Fujian Free Trade Zone could contribute to further "hollowing out" Taiwan's economy. Taiwan's economy.

In an effort to liberalize cross-Strait trade and investment, Taiwan and China have signed 21 trade deals since President Ma took office in 2008. The two most important cross-Strait economic agreements are ECFA, signed in June 2010, and the follow-on CSSTA. ECFA is an early harvest agreement that provides the foundation for future

cross-Strait economic integration, laying out a roadmap for four subsequent agreements concerning investment protection, trade in goods, trade in services, and dispute settlement. Since it was signed, ECFA has reduced tariffs in both countries, and reportedly saved Taiwan's firms over \$1 billion in customs duties over the first four years. However, the agreement remains highly controversial. While ECFA has opened up cross-Strait trade, some in the DPP, including Dr. Tsai, argue the deal benefits only a few of Taiwan's largest firms at the expense of small and medium-sized enterprises. Eric Chu and the KMT, meanwhile, advocate for expanding ECFA to deepen economic ties with China. Ultimately, significant progress on trade and investment deals under ECFA is unlikely, regardless of who wins the election, because of the cross-Strait supervisory bill stuck in the Legislative Yuan; if the supervisory bill passes, it could result in the two sides needing to renegotiate previously agreed upon but still pending agreements.

The CSSTA, signed in 2013, remains in Taiwan's Legislative Yuan awaiting ratification. <sup>156</sup> The CSSTA would increase cross-Strait trade in services by eliminating investment restrictions and other barriers across 64 service industries in Taiwan and 80 service industries in China. <sup>157</sup> The CSSTA would cut tariffs on 10,000 categories of goods shipped between China and Taiwan, including automotive parts, display panels, machine tools, and petrochemicals—impacting industries that comprise about 30 percent of Taiwan's exports. <sup>158</sup> Promoted by President Ma under ECFA, the CSSTA is expected to benefit Taiwan's financial and retail industries, but public and legislative opposition to the agreement has effectively stalled ratification. <sup>159</sup> The DPP and other opponents argue the CSSTA will create unfair competition, marginalize Taiwan's low-end service sector businesses, and expose Taiwan to increased economic and political influence from China. <sup>160</sup>

In the face of stalled trade negotiations, Chinese officials have released statements promoting further cross-Strait economic integration, including applauding Taipei's mayor after giving a speech on the merits of closer relations with China. In June 2015, China also opened an office of its Association of the Economy and Trade Across the Taiwan Strait (AETATS) in Taipei. The office is the second of its kind to be established in Taiwan by a Chinese economic and trade association, and aims to promote cross-Strait trade and investment by helping its members to establish relations with their Taiwan counterparts and conduct activities ranging from trade and investment to exhibitions, training, and forums.<sup>161</sup>

However, not all comments from China have been favorable toward Taiwan. China released statements \*reprimanding the United States for hosting Dr. Tsai at State Department headquarters in June 2015, signaling that cross-Strait tensions could increase if Dr. Tsai is elected president in January 2016. Dr. Tsai's statements about tilting Taiwan away from China and indications that she wants to foster closer links with Southeast Asia and bring Taiwan into the TPP worry officials in Beijing and threaten to derail cross-Strait cooperation. Description 163

#### **Taiwan and the United States**

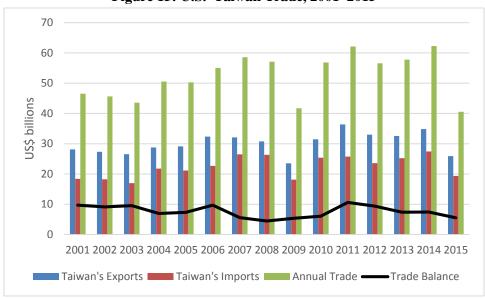
Although U.S.-Taiwan economic relations are expected to continue improving, the DPP has prioritized increased ties with the United States, focusing on joining the TPP and furthering TIFA negotiations. The United States is Taiwan's second-largest trading partner behind China and its largest source of foreign investment. <sup>164</sup> Strong economic ties between the United States and Taiwan have been relatively unaffected by changes in Taiwan's political leadership, with economic relations slowing only from 2008 to 2009 during the global financial crisis. However, substantive progress on ongoing trade and investment negotiations has slowed, caused by the still unsettled question of market access for U.S. pork exports as well as a U.S. focus on other deals in the region, especially the TPP. <sup>165</sup> While the KMT believes RCEP and other regional FTAs are equally important as participation in the TPP, the DPP campaign has focused mainly on advocating for Taiwan joining the TPP, suggesting a DPP-led government would be more inclined to prioritize the U.S.-Taiwan TIFA over advancing pending cross-Strait agreements. <sup>166</sup>

In 2014, U.S.-Taiwan annual trade reached a record high of \$67.4 billion, an increase of 6 percent year-on-year, with the United States moving ahead of Japan to become Taiwan's second-largest trading partner. <sup>167</sup> Though it is

<sup>\*</sup> A spokesperson for China's Taiwan Affairs Office said, "The [meetings] went against the peace and stability of the Taiwan Strait and harmed peaceful developments of cross-Strait ties." Xinhua (English edition), "China Reprimands U.S. over Taiwan Meeting," June 10, 2015. http://news.xinhuanet.com/english/2015-06/10/c\_134315139.htm.

only the 26th-largest economy in the world (based on GDP), Taiwan became the tenth-largest trading partner of the United States in 2014, passing both India and Saudi Arabia. Unlike cross-Strait trade, trade between the United States and Taiwan has continued to increase in 2015; in the first nine months of 2015, the United States accounted for 11.7 percent of Taiwan's total trade, up from 10.3 percent in 2014.

Taiwan exports to the United States consist mostly of manufactured parts and accessories, including cell phones, motor vehicle parts and accessories, and office machine parts and accessories. The global markets for computers and mobile phones, however, are becoming increasingly saturated, with increased competition—especially from China—hurting Taiwan's manufacturing sector. Taiwan's trade surplus with the United States has steadily decreased over the past five years, down 30 percent between 2011 and 2014 (see Figure 15). In 2011, Taiwan's exports to the United States peaked at \$36.4 billion, led by exports of cellphones (\$7 billion), machine parts (\$1.5 billion), and microchips (\$1.4 billion). In the first nine months of 2015, Taiwan's top exports were largely the same as in 2011, but the volume of exports had decreased significantly; cellphones, for instance, which remain the largest Taiwan export to the United States, registered at only \$1.6 billion, down 11.8 percent from the same period in 2014.



**Figure 15: U.S.–Taiwan Trade, 2001–2015** 

Note: Data for 2015 are through September.

Source: Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.

Compared to its trade with China, Taiwan's trade with the United States is more diversified, but still relies heavily on the semiconductor industry. In the first nine months of 2015, the top U.S. exports to Taiwan were semiconductor manufacturing machinery (\$2.3 billion), microchips (\$2.3 billion), and aircraft (\$1.3 billion). While the United States had not officially sold military equipment to Taiwan for a four-year period from 2011 to 2015, arms sales have accounted for a substantial portion of U.S.-Taiwan trade in the past, with Taiwan receiving \$2.9 billion in U.S. defense articles between 2008 and 2011, making it the fifth-highest recipient of U.S. arms in the world during that time. In December 2015, President Obama authorized a \$1.83 billion arms sale to Taiwan consisting of guided missile frigates, anti-tank missile, amphibious assault vehicles, and other equipment, despite opposition from China. In China.

Investment levels between the United States and Taiwan also remain robust. In 2010, U.S. FDI into Taiwan peaked at \$22.2 billion, led by \$10 billion of investments in Taiwan's finance and insurance sector—nearly half of the total investments. In 2014, U.S. FDI into Taiwan had decreased to \$17 billion, with \$4.1 billion invested in the manufacturing of computer and electronic products. U.S. investment in Taiwan's high-tech industries increased 151 percent from 2005 to 2014, while U.S. investment in Taiwan's finance and insurance sector, which reached a high of \$10 billion in 2010, decreased 87 percent to \$1.3 billion in 2014 (see Figure 16). 176

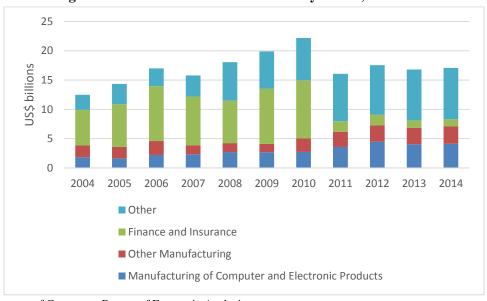


Figure 16: U.S. FDI Flows into Taiwan by Sector, 2004–2014

Source: U.S. Department of Commerce Bureau of Economic Analysis.

While U.S.-Taiwan trade and investment have been strong in recent years, ongoing negotiations for further economic cooperation have slowed under President Ma.<sup>177</sup> In the absence of official relations, both sides have discussed a range of bilateral economic issues through negotiations toward a TIFA. Since being established in 1994, the U.S.-Taiwan TIFA talks have included high-level economic and trade consultations, bilateral trade dispute resolution, trade promotion, and investment cooperation between the U.S. and Taiwan. Recently, however, these negotiations have repeatedly hit major pitfalls.<sup>178</sup> TIFA talks were on hold from 2007 to 2012 due to Taiwan's refusal to import American beef containing ractopamine, a common feed additive, but resumed in 2013 when the Taiwan legislature partially lifted restrictions.<sup>179</sup> More recently, meetings scheduled for April 2015 were postponed to allow the United States to focus on completing the TPP and trade promotion authority negotiations.<sup>180</sup>

Nevertheless, on a trip to Taipei in June 2015, Assistant Secretary of State for Economic and Business Affairs Charles Rivkin stated that unofficial talks about how to enhance bilateral economic cooperation continue to occur regularly. In October 2015 in Taipei, U.S. and Taiwan officials held a TIFA meeting that included discussions on a range of bilateral economic issues, including agriculture, pharmaceuticals and medical devices, intellectual property rights, trade barriers, and investment. In addition to these issues, the talks covered a potential bilateral investment agreement and Taiwan's aspirations to join the TPP. The meeting reportedly did not include a discussion about Taiwan's restrictions on U.S. pork imports, which remains a contentious area in ongoing negotiations. Since 2012, members of Congress have raised concerns about Taiwan's restrictions on U.S. pork. Several key roadblocks to overturning restrictions include pressure from Taiwan's pork industry and Taiwan citizens' aversion to the use of ractopamine in pork production. Although Taiwan loosened some restrictions on residual levels of ractopamine in U.S. beef imports, it maintains these restrictions on pork imports. If Taiwan can create a food source labeling system, allowing those opposed to consuming ractopamine to buy domestically produced pork, it could minimize the opposition from consumer organizations.

While both the KMT and DPP have stated their desire to advance TIFA, the DPP may be better positioned than the KMT to further TIFA talks. The KMT's focus on China-centric economic agreements, along with statements from Mr. Chu defending strict food safety standards, suggest that resolving pork import disputes would not be prioritized under a KMT administration, leading to little progress on TIFA. Meanwhile, Dr. Tsai has indicated that her administration may allow imports of pork containing ractopamine. The DPP's plan for diversifying trade hinges on joining the TPP, providing significant incentive for the party to compromise on pork import restrictions. To appease Taiwan's agriculture sector—traditionally a DPP ally—which has been resisting foreign imports, Dr. Tsai has stated that she will seek reforms to boost farmers' competitiveness in international operations while also working to pass a labeling system and lift the ractopamine restrictions. The DPP is plan for diversifying trade hinges on joining the TPP, providing significant incentive for the party to compromise on pork import restrictions. The DPP ally—which has been resisting foreign imports, Dr. Tsai has stated that she will seek reforms to boost farmers' competitiveness in international operations while also working to pass a labeling system and lift the ractopamine restrictions.

#### Taiwan and the Association of Southeast Asian Nations (ASEAN)

Under the Lee Tung-hui Administration (1988–2000), Taiwan launched a "Go South" policy aimed at fostering economic linkages between Taiwan and Southeast Asia, which led to a significant expansion in Taiwan's trade and investment relationship with ASEAN. Since 2000, Taiwan's total trade with ASEAN countries has more than doubled (see Figure 17). As with Taiwan's overall trade, its trade with ASEAN expanded more rapidly in the years immediately following its 2001 WTO accession. In 2014, Taiwan's total trade with ASEAN measured \$93 billion, with Singapore, Malaysia, Vietnam, and Indonesia ranking as its top ASEAN trading partners. In addition to trade, Taiwan investment into ASEAN is also increasing, though it still pales in comparison to Taiwan's Chinabound FDI. However, rising wages and overall input costs in China have made ASEAN a more attractive destination for Taiwan's textiles and low-tech electronics manufacturing. From 2002 to 2012, Taiwan's bilateral investment with Indonesia, Malaysia, Philippines, Thailand, and Vietnam increased from \$503 million to \$6 billion. Heavily focused on low-end manufacturing, whereas in the Philippines and Malaysia investment is primarily focused on manufacturing of intermediate goods for the ICT sector. Heavily focused on manufacturing of intermediate goods for the ICT sector.



Figure 17: Taiwan Trade with ASEAN, 2000-2015

Note: Data for 2015 are through September.

Source: Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.

Taiwan's engagement with Southeast Asia since the launch of the "Go South" policy in 1993 has been an important part of its strategy to diversify beyond trade with China, and is therefore gaining renewed attention in the current election season. Dr. Tsai has proposed a "new southward policy" that expands beyond continued economic ties with ASEAN. Dr. Tsai's proposal aims to expand the policy to include greater cultural, educational, and civilian exchanges. Moreover, the new policy aims to build stronger relations with India and Burma (Myanmar), including increased trade and investment. While the KMT does not have an official position on expanding relations in Asia, their ambitions to join RCEP, an ASEAN-organized trade deal, and interest in participating in the Asian Infrastructure Investment Bank and "One Belt, One Road" initiative further indicates that the KMT's approach to global economic engagement is primarily based on expanding economic relations with China.

## Taiwan and Japan

Japan is Taiwan's third-largest trading partner, behind China and the United States, accounting for 10.5 percent of Taiwan's total trade. Unlike trade with China or ASEAN, however, trade growth with Japan has not increased in recent years. Trade peaked in 2011 at \$70 billion, but has been declining in recent years, down to \$61.5 billion in

<sup>\*</sup> For more analysis of the AIIB and "One Belt, One Road" initiatives, see the U.S.-China Economic and Security Review Commission's 2015 Annual Report to Congress, November 2015, 61-62 and 395-398.

2014—the same level as 2005.<sup>202</sup> Japan and Taiwan's strong economic relationship is in part a result of their shared history. From 1895 to 1945, Taiwan was a Japanese colony, and benefitted from a strong agricultural and industrial base as a direct result of Japanese investments to build better irrigation and reservoir systems.<sup>203</sup> Today, economic relations between Japan and Taiwan are driven by the Taiwan-Japan Investment Protection Agreement, signed in September 2011, which established a model for dispute settlements and focused on investment promotion, protection, and liberalization.<sup>204</sup> Taiwan and Japan also signed a fisheries agreement in April 2013, allowing both countries access to the waters beyond 12 nautical miles of the disputed Senkaku Islands (called the Diaoyu Islands in China and the Tiaoyutai Islands in Taiwan) in the East China Sea. The deal established a fisheries commission to review disputes on an annual basis and allocated 1,400 additional nautical miles of fishing zones to Taiwan.<sup>205</sup>

While the Taiwan-Japan Investment Protection Agreement and fisheries agreement were signed under President Ma, the KMT typically focuses less on forging closer relations with Japan than does the DPP. Mr. Chu has not mentioned Japan directly since he became the KMT's candidate, only speaking about Japan in relation to RCEP and the TPP, and has yet to visit Japan in the run-up to the election. Dr. Tsai, on the other hand, met with officials from Japan's two major political parties during her trip to Japan in October 2015, discussing security, regional economic integration, and a stronger economic relationship. To Japan with the DPP's secretary-general, also described Japan as "Taiwan's most important as well as the best friend in the region."

#### **Taiwan and its Free Trade Partners**

As of 2015, Taiwan has bilateral FTAs with Paraguay, the Dominican Republic, Guatemala, Nicaragua, Panama, New Zealand, and Singapore, and one trilateral FTA with El Salvador and Honduras.<sup>209</sup> Taiwan's low number of FTAs is mostly due to political pressure from China, which deters countries from signing agreements with Taiwan.<sup>210</sup> Taiwan succeeded in signing FTAs with its Central American partners largely because these are some of the few countries that maintain diplomatic relations with Taiwan.<sup>211</sup> As such, Taiwan's most recent FTAs with New Zealand and Singapore, which do not have formal relations with Taiwan, were hailed as great successes.<sup>212</sup> According to reports in Taiwan, Beijing did not obstruct these deals because Singapore and New Zealand already have trade pacts with China.<sup>213</sup> In the first nine months of 2015, Taiwan's trade with Singapore reached nearly \$19 billion, making it Taiwan's sixth-largest trade partner.<sup>214</sup> However, aside from Singapore, Taiwan conducts a negligible level of trade with its FTA partners. In the first nine months of 2015, Taiwan's trade with its FTA partners (excluding Singapore) represented just 0.4 percent of its global exports and 0.5 percent of its global imports.<sup>215</sup>

Unlike with other FTAs, the FTAs with New Zealand and Singapore required Taiwan to classify itself as a "Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu," its WTO designation, to avoid protest from Beijing. In addition, some analysts argue that signing ECFA helped ease Chinese opposition to the agreements with Singapore and New Zealand and will continue to allow for Taiwan's participation in other FTAs. Taiwan hopes to sign similar FTAs with India, the Philippines, and Israel. 18

Taiwan's bilateral FTAs set the foundation for its overarching ambitions to join new multilateral FTAs such as the TPP and RCEP. Many officials in Taiwan, including President Ma, have advocated for Taiwan's participation in both the TPP and RCEP. President Ma pledged in his 2012 inaugural address to prepare Taiwan for TPP inclusion within eight years. <sup>219</sup> Meanwhile, Deputy Minister of Taiwan's Mainland Affairs Council Lin Chu-chia said Taiwan's exclusion from these trade deals "[is] a big problem" because "international economic co-operation is quickly increasing and Taiwan is a small, open economy"; therefore "without TPP and RCEP, [Taiwan] is in big trouble." <sup>220</sup> Five of Taiwan's top ten trading partners will be TPP members, representing 35 percent of Taiwan's total trade. <sup>221</sup> Some estimates project that if Taiwan were to join RCEP, its GDP could increase by as much as 4 percent. <sup>222</sup> In the current election, the DPP has focused on TPP participation, while the KMT has prioritized participation in RCEP. Given that China has stipulated that Taiwan must complete all ECFA agreements before consideration for RCEP, and that completion of the U.S.-Taiwan TIFA would help pave the way for Taiwan's participation in the TPP, it is expected that a KMT administration would further trade liberalization with China, as under President Ma, while a DPP-led government might prioritize deeper economic cooperation with the United States (see "Election 2016: Debating Taiwan's Economic Future").

## **Conclusions**

Taiwan's upcoming presidential and legislative elections will take place against the backdrop of a struggling economy marred by near-zero growth, stagnant wages, rising prices and the looming threats of an energy shortage, low domestic investment, and overdependence on China. These economic problems, largely at the forefront of the minds of Taiwan's electorate, are expected to be the deciding factors in the January 2016 election. The following conclusions outline some of the key findings of this report regarding Taiwan's economic challenges, the political debates surrounding them, and future policy options to steer Taiwan's economy back toward sustainable growth.

- Taiwan's two major political parties—the Chinese Nationalist Party (KMT) and the Democratic Progressive Party (DPP)—have shifted the focus of their campaigns from the traditional question of Taiwan's sovereignty to economic issues, where divergent views on the future direction of Taiwan's economy now largely determine how Taiwan citizens will cast their votes.
- The DPP, led by its presidential candidate and election frontrunner Dr. Tsai Ing-wen, generally advocates for improving Taiwan's domestic economy by expanding social welfare benefits, raising the minimum wage, and promoting local sources of innovation. Meanwhile, the incumbent KMT and its candidate Eric Chu prioritize Taiwan's external economic relations, advocating further trade liberalization—especially with China—as a means of supporting export-led growth.
- Stagnant wages combined with unemployment in Taiwan's largely high-skilled workforce, weak entrepreneurial innovation, and low inbound investment explain why Taiwan is in a period of slowing economic growth. The severity of these domestic economic problems may explain why DPP candidate Dr. Tsai has maintained a strong lead in election polls.
- With China ranking as its largest trade partner, Taiwan's export-oriented economy has become dependent on China and vulnerable to fluctuations in China's economy. Notably, China's recent economic slowdown has lowered Taiwan's exports to China, contributing to a growth rate that has slowed to nearly zero.
- Although China carries the dominant share of Taiwan's trade, Taiwan maintains strong economic relations with the United States, Southeast Asia, Japan, and a small number of FTA partners. Further economic cooperation with a wider range of partners could help Taiwan diversify its export markets, identify solutions to its energy shortage, and attract much needed inbound foreign direct investment.
- Both major political parties are advocating for a diversification of export markets through Taiwan's participation in a broader set of FTAs. The KMT prioritizes trade liberalization with China under the cross-Strait Economic Cooperative Framework Agreement (ECFA) as a means of gaining admission to other FTAs. Meanwhile, the DPP campaign is advocating primarily for Taiwan's participation in the U.S.-backed Trans-Pacific Partnership (TPP).
- Regardless of the election's outcome, progress on pending ECFA-related agreements will be limited.
  Besides needing to sign into law the cross-Strait supervisory bill, pending agreements will need to be
  reviewed under the new supervisory structure and potentially be renegotiated, which China may be
  unwilling to do.
- The DPP campaign's focus on the TPP and the party's historical political ties to Taiwan's agricultural sector suggest it might be more inclined toward and politically capable of making key concessions on market access for U.S. pork products as a means of finalizing negotiations toward a U.S.-Taiwan Trade and Investment Framework Agreement (TIFA), which it may see as setting the foundation for Taiwan's future TPP candidacy.

## **Appendix**

#### Appendix I: The DPP's Economic Leadership

The expected transition to a DPP-led government in Taiwan would usher in a new team of economic policymakers. The following individuals are a selection of economists who serve as top advisors to Dr. Tsai and would likely take on prominent roles in steering Taiwan's economy if Dr. Tsai wins the election. Several of these individuals served in key economic policymaking roles under the 2000–2008 DPP administration of Chen Shui-bian.

Lin Chuan: A U.S.-trained economist, Dr. Lin Chuan is among the most prominent of the DPP's economic advisors. Dr. Lin served in two key economic roles during the Chen Administration: Minister of Finance (2002–2006) and Director-General of Budget, Accounting and Statistics (2000–2002). Since the end of the Chen Administration, Dr. Lin has continued to serve as a leading economic strategist for Dr. Tsai and the DPP. From 2012 to 2014, Dr. Lin served as the Executive CEO of the Thinking Taiwan Foundation, which was founded by Dr. Tsai; since 2014, he has served as the president of the DPP's think tank, the New Frontier Foundation. Dr. Lin has criticized the Ma Administration for focusing solely on improving economic ties with China while allowing Taiwan-based businesses with interests in China to dictate the direction of cross-Strait negotiations. Dr. Lin argues the Ma Administration's failure to identify and develop new economic engines for growth and "narrow focus" on free trade with China has led Taiwan into its current period of economic stagnation. Dr. Lin has advocated for a comprehensive growth strategy that includes stimulating innovation, financial sector reform, and diversification of free trade partners.

*Hu Sheng-cheng:* Dr. Hu Sheng-cheng, also a U.S.-trained economist, likewise served as a prominent economic advisor under the previous DPP administration. Under former President Chen, Dr. Hu served as the chairman of both the Financial Supervisory Committee (2007–2008) and the Council of Economic Planning and Development (2004–2007). He served on the Board of Directors of Taiwan's central bank from 2000 to 2001, and as a minister without portfolio advising then President Chen on laws and bills submitted by the Ministries of Economic Affairs, Finance, Agriculture, Labor, and Health.<sup>228</sup> He currently sits on the board of the DPP think tank New Frontier Foundation and regularly advises Dr. Tsai on economic issues. Dr. Hu believes Taiwan's economy has become too reliant on exports, specifically the export of high-tech manufactured goods, arguing that Taiwan should diversify its areas of competitive advantage by linking high-tech sectors with more traditional industries, such as precision machinery.<sup>229</sup> He believes Taiwan should be using its strong presence in China to expand to other regional markets. He has also cited the need to expand investment opportunities domestically to curb capital flight and foster economic growth. Dr. Hu has also called for greater financial sector liberalization and government deregulation.<sup>230</sup>

Shih Jun-ji: An expert in financial economics, industrial economics, and anti-trust policy, Dr. Shih Jun-ji is another senior economic advisor to Dr. Tsai and a board member of the New Frontier Foundation. Dr. Shih served a short but tumultuous tenure as Chairman of the Financial Supervisory Committee (FSC), Taiwan's financial regulator, from August 2006 to January 2007. Formerly the commissioner of the Fair Trade Commission (1998–2001), Dr. Shih was appointed to the FSC in the aftermath of a corruption crisis surrounding his predecessor, and was expected to restore trust in the agency. Six months after his appointment, Dr. Shih submitted his resignation after a major Taiwan conglomerate collapsed, exposing extensive malpractice in Taiwan's financial sector. Recently, Dr. Shih has spoken on Taiwan's trade strategy, stating that "cross-Strait economic and trade consultations must continue to go forward" to remedy existing problems such as a currency settlement agreement that has allowed traders in China to earn interest payments of nearly \$1 billion on the backflow of renminbi (RMB) from Taiwan. Allowed traders in China also expressed his support for Taiwan's entry into the TPP and has stated that the current KMT-led government's efforts for Taiwan to join the TPP would continue with a "seamless transition" under a Tsai Administration.

**Kung Ming-hsin:** Dr. Kung Ming-hsin is currently the vice president of the Taiwan Institute of Economic Research, a private independent think tank in Taiwan, and an adjunct researcher of science and technology at the Advisory Group of Taiwan's Executive Yuan. Dr. Kung is leading an industrial task force for the Tsai campaign, and with his combined expertise in economics and technology policy has spearheaded some key proposals on the Tsai economic platform. For example, Dr. Kung helped develop Dr. Tsai's proposal to establish Taiwan as a regional industrial center for biomedical research and development (R&D) and has said there is potential for greater cross-

Strait cooperation in this area, including increasing Taiwan's medical equipment exports to China.<sup>237</sup> Dr. Kung has also stated his support for Dr. Tsai's proposal to develop Taiwan's national defense industry, estimating the plan will generate \$7 billion to \$12 billion in net profits and about 8,000 jobs.<sup>238</sup>

*Chen Po-chih:* Currently the chairman of Taiwan Think Tank, Dr. Chen Po-chih served as the Minister of the Council for Economic Planning and Development from 2000 to 2002 and was a key economic advisor in both the Lee and Chen Administrations.<sup>239</sup> Dr. Chen has criticized the Ma Administration for failing to address Taiwan's fundamental economic problems, for which he accuses the government of hiding behind statistics and rankings.<sup>240</sup> Dr. Chen has advised that Taiwan should focus on developing sectors where it has a niche competitive advantage, such as certain high-tech goods, rather than simply linking itself to popular trends in the global economy.<sup>241</sup> Dr. Chen has also blamed unfair economic policies in China that favor domestic firms for imbalances across the Taiwan Strait and has called on Taiwan's authorities to use information obtained by Taiwan investors in China to protest such policies through the WTO.<sup>242</sup>

**Appendix II: Select Taiwan Trade Partners** 

		US\$ billions			Share of Taiwan's Total Trade (%)				
		2000	2005	2010	2015	2000	2005	2010	2015
China	Exports	4.2	43.6	76.9	53.9	2.8	22	28	25.4
	Imports	6.2	20.1	35.9	32.7	4.4	11	14.3	18.8
	Balance	(2)	23.5	41	21.2				
	Exports	34.8	29.1	31.5	25.9	23.5	14.7	11.5	12.2
United States	Imports	25.1	21.2	25.4	19.3	17.9	11.6	10.1	11.1
	Balance	9.7	7.9	6.1	6.6				
	Exports	16.6	15.1	18	14.4	11.2	7.6	6.6	6.8
Japan	Imports	38.6	46.1	51.9	29.2	27.5	25.2	20.7	16.8
	Balance	(22)	(31)	(33.9)	(14.8)				
	Exports	31.1	34	37.8	28.4	21.1	17.2	13.8	13.4
Hong Kong	Imports	2.2	2.1	1.6	1.1	1.6	1.2	0.6	0.6
	Balance	28.9	31.9	36.2	27.3				
	Exports	3.9	5.9	10.7	9.6	2.6	3	3.9	4.5
South Korea	Imports	9	13.2	16.1	9.8	6.4	7.3	6.4	5.7
	Balance	(5.1)	(7.3)	(5.4)	(0.2)				
Singapore	Exports	5.5	8	12.1	13.4	3.7	4.1	4.4	6.3
	Imports	5	5	7.6	5.5	3.6	2.7	3	3.2
	Balance	0.5	3	4.5	7.9				
ASEAN (excluding Singapore)	Exports	13	19.4	29.9	25.6	8.8	9.8	10.9	12.1
	Imports	15.2	16.2	21.3	16.6	10.9	8.9	8.5	9.5
	Balance	(2.2)	3.2	8.6	9				
Other FTA Partners (excluding Singapore)	Exports	0.9	1	1.1	0.8	0.6	0.5	0.4	0.4
	Imports	0.4	0.6	0.8	0.9	0.3	0.3	0.3	0.5
	Balance	0.5	0.4	0.3	(0.1)				

Note: Data for 2015 are through September.

Source: Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.

## **Endnotes**

- <sup>1</sup> Council on Foreign Relations, "Q&A: Taiwan Election," New York Times, March 18, 2003. http://www.nytimes.com/cfr/international/slot2\_031904.html?pagewanted=print&position=&\_r=0.
- Nations Encyclopedia, "Taiwan Political Parties." http://www.nationsencyclopedia.com/Asia-and-Oceania/Taiwan-POLITICAL-PARTIES.html.
- <sup>3</sup> Taiwan Brain Trust, "TBT Survey: Assessment of Taiwan Society, Economics, Cross-Strait Relationship, and 2016 Election," September 26, 2015. http://en.braintrust.tw/article\_detail/2093.
- William Sharp, Jr., "Taiwan: Tsai Ing-wen's Real Challenge," Diplomat (Tokyo), September 29, 2015. http://thediplomat.com/2015/09/taiwan-tsai-ing-wens-real-challenge/.
- <sup>5</sup> Elise Hu, "As Taiwan Gears up for Elections, China, as Always, Looms Large," *National Public Radio*, November 5, 2015; J.R. Wu, "Taiwan's Likely First Woman President Keeps Cards Close on China Game Plan," *Business Insider*, December 8, 2015.
- <sup>6</sup> Taiwan News, "Picking the Right Type of Status Quo," Eye on Taiwan, September 17, 2015. http://www.eyeontaiwan.com/picking-the-right-type-of-status-quo.
- <sup>7</sup> Want China Times, "The Dream of Hung Hsiu-chu and the KMT's 'Anti Anti-China' Union," July 16, 2015. http://www.wantchinatimes.com/news/content?id=20150716000005&cid=1701.
- <sup>8</sup> Agence France-Presse, "Protests in Taiwan as Ma Prepares for Historic Meeting with Xi Jinping," *Guardian*, November 6, 2015. http://www.theguardian.com/world/2015/nov/07/protests-in-taiwan-as-ma-prepares-for-historic-meeting-with-xi-jinping.
- <sup>9</sup> Stephanie Chao, "One Taiwan' Is To Be Campaign Slogan of KMT's Eric Chu," *China Post* (Taiwan), November 2, 2015. http://www.chinapost.com.tw/taiwan/national/national-news/2015/11/02/449862/ONE-Taiwan.htm.
- <sup>10</sup> Stacy Hsu, "Ma-Xi Meeting: Eric Chu Pleas for Issue-Based Election," *Taipei Times*, November 11, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/11/11/2003632192.
- <sup>11</sup> Taiwan Brain Trust, "TBT Survey: Assessment of Taiwan Society, Economics, Cross-Strait Relationship, and 2016 Election," September 26, 2015. http://en.braintrust.tw/article\_detail/2093.
- <sup>12</sup> Sarah Mishkin and David Pilling, "Taiwan: Time to Change Gear," *Financial Times*, April 9, 2013. http://www.ft.com/intl/cms/s/0/Ifaf59d8-9e04-11e2-9ccc-00144feabdc0.html#axzz3u1goqdGr.
- <sup>13</sup> Min-Hua Huang, "Taiwan's Changing Political Landscape: The KMT's Landslide Defeat in the Nine-in-One Elections," *Brookings Institution*, December 2014. <a href="http://www.brookings.edu/research/opinions/2014/12/08-taiwan-political-landscape-elections-huang">http://www.brookings.edu/research/opinions/2014/12/08-taiwan-political-landscape-elections-huang</a>.
- <sup>14</sup> New York Times, "An Interview with President Ma Ying-jeou," June 19, 2008. http://www.nytimes.com/2008/06/19/world/asia/19taiwan-interview.html?pagewanted=all.
- <sup>15</sup> New York Times, "An Interview with President Ma Ying-jeou," June 19, 2008. http://www.nytimes.com/2008/06/19/world/asia/19taiwan-interview.html?pagewanted=all.
- <sup>16</sup> U.S.-China Economic and Security Review Commission, 2014 Annual Report to Congress, November 2014.
- <sup>17</sup> Ko Shu-ling, "Ma Sees ECFA as Tool for Peace in Strait," *Taipei Times*, April 29, 2010. http://www.taipeitimes.com/News/taiwan/archives/2010/04/29/2003471760.
- <sup>18</sup> David Ting, "Ma's 'Golden Decade' for Taiwan," China Post (Taiwan), August 20, 2010; Taiwan Ministry of Finance via CEIC database; Tradingeconomics.com.
- <sup>19</sup> David Ting, "Ma's 'Golden Decade' for Taiwan," *China Post* (Taiwan), August 20, 2010. http://www.chinapost.com.tw/commentary/the-china-post/david-ting/2010/08/20/269348/Mas-golden.htm.
- <sup>20</sup> Paul Beckett and Charles Hutzler, "Taiwan's Ma Ying-jeou Warns against Letting Beijing Ties Cool," *Wall Street Journal*, May 10, 2015. http://www.wsj.com/articles/taiwans-ma-ying-jeou-warns-against-letting-beijing-ties-cool-1431293641.
- <sup>21</sup> Mainland Affairs Council (Taiwan), "President Ma Holds Press Conference on 'Cross-Strait Peace Agreement," October 20, 2011. http://www.mac.gov.tw/ct.asp?xItem=98966&ctNode=5908&mp=3,
- <sup>22</sup> Ma Ying-jeou, "Achieving a Golden Decade for Taiwan," *Office of the President* (Taiwan), October 5, 2011. http://english.president.gov.tw/Default.aspx?tabid=1123.
- <sup>23</sup> Michelle Lu, "President Ma Sees 'Golden Decade' at Halfway Mark," *Taiwan Today*, May 19, 2010. http://taiwantoday.tw/ct.asp?xItem=103797&CtNode=419.
- <sup>24</sup> Taiwan Directorate-General of Budget, Accounting and Statistics and Statistics Korea via CEIC database.
- <sup>25</sup> New York Times, "Interview with Taiwan President Ma Ying-jeou," January 5, 2012. http://www.nytimes.com/2012/01/05/world/asia/interview-with-taiwan-president-ma-ying-jeou.html.
- <sup>26</sup> Mark Mackinnon, "Ma's Re-Election in Taiwan Eases Superpower Tensions," *Globe and Mail*, January 15, 2012. http://www.theglobeandmail.com/news/world/mas-re-election-in-taiwan-eases-superpower-tensions/article1358509/.
- <sup>27</sup> Andrew Jacobs, "President of Taiwan Is Re-Elected, a Result That Is Likely to Please China," *New York Times*, January 14, 2012. http://www.nytimes.com/2012/01/15/world/asia/taiwan-presidential-election.html.
- <sup>28</sup> Ming-Tong Chen, "Taiwan in 2012: Curse of the Second-Term President?" Asian Survey, January–February 2013, 206–213.
- <sup>29</sup> Mo Yan-chih and Shih Hsiu-chuan, "Ma Adjusts Electricity Rate Hike Plan," *Taipei Times*, May 2, 2012. http://www.taipeitimes.com/News/front/archives/2012/05/02/2003531773.
- <sup>30</sup> Chinmei Sung and Weiyi Lim, "Taiwan Cabinet Approves Capital-Gains Tax on Stock Trades," Bloomberg Business, April 26, 2012. http://www.bloomberg.com/news/articles/2012-04-26/taiwan-cabinet-approves-capital-gains-tax-plan-from-2013-1-.
- <sup>31</sup> Economist Intelligence Unit, "President Scores a Legislative Victory," July 27, 2012. http://country.eiu.com/article.aspx?articleid=529332637&Country=Taiwan&topic=Politics&oid=2023425386&aid=1.

- <sup>32</sup> Grace Kuo, "Ma Calls for Backing of 12-Year Education Plan," *Taiwan Today*, April 26, 2012. http://taiwantoday.tw/ct.asp?xItem=189781&ctNode=2175.
- <sup>33</sup> JoAnn Fan, "The Economics of the Cross-Strait Services Agreement," *Diplomat* (Tokyo), April 18, 2014. http://thediplomat.com/2014/04/the-economics-of-the-cross-strait-services-agreement/.
- <sup>34</sup> U.S.-China Economic and Security Review Commission, 2014 Annual Report to Congress, November 2014; U.S.-China Economic and Security Review Commission, 2015 Annual Report to Congress, November 2015.
- 35 Crystal Hsu, "Trade Pact Siege: Majority Opposes Trade Agreement: Poll," *Taipei Times*, March 27, 2014. http://www.taipeitimes.com/News/taiwan/archives/2014/03/27/2003586647.
- <sup>36</sup> Taiwan Executive Yuan, Executive Yuan Approves Draft Bill on Cross-Strait Agreement Supervision, April 2, 2014. http://www.ey.gov.tw/en/News\_Content2.aspx?n=1C6028CA080A27B3&s=38451DE4C3084458.
- <sup>37</sup> China Post (Taiwan), "Cross-Strait Oversight Bill Calls for Long-Term Planning," April 7, 2015. http://www.chinapost.com.tw/editorial/taiwan-issues/2015/04/07/432973/Cross-strait-oversight.htm.
- <sup>38</sup> Matthew Southerland and Kevin Rosier, "Taiwan's 2014 Local Elections: Implications for Cross-Strait Relations," *U.S.-China Economic and Security Review Commission*, December 30, 2014.
- <sup>39</sup> Paul Beckett and Charles Hutzler, "Q&A: Taiwan's President Ma Ying-jeou on China Ties, Policy and His Legacy," *Wall Street Journal*, May 10, 2015. *http://www.wsj.com/articles/q-a-taiwans-president-ma-ying-jeou-on-china-ties-policy-and-his-legacy-1431309939*.
- <sup>40</sup> Glenn Smith, "Taiwan's Sunflower Revolution: One Year Later," Foreign Policy in Focus, May 7, 2015. http://fpif.org/taiwans-sunflower-revolution-one-year-later/.
- <sup>41</sup> Diane Baker, "Ma to Meet Xi in Singapore on Saturday," *Taipei Times*, November 4, 2015. http://www.taipeitimes.com/News/front/archives/2015/11/04/2003631684.
- <sup>42</sup> Reuters, "Taiwanese Opposition Leader Tsai Ing-wen Extends Lead in Post-Xi-Ma Summit Opinion Poll," South China Morning Post, November 10, 2015. http://www.scmp.com/news/china/policies-politics/article/1877215/taiwanese-opposition-leader-tsai-ing-wen-extends-lead.
- <sup>43</sup> William Ide, "Taiwan China Historic Talks Fuel Criticism at Home," *Voice of America*, November 8, 2015. http://www.voanews.com/content/taiwan-china-historic-talks-fuel-criticism-at-home/3048787.html.
- <sup>44</sup> William Wan, "Ahead of Taiwan Elections, Presidential Candidate Defends Outreach to China," *Washington Post*, November 17, 2015. https://www.washingtonpost.com/news/worldviews/wp/2015/11/17/taiwans-ruling-party-now-the-underdog-a-q-a-with-its-presidential-candidate/.
- <sup>45</sup> William Wan, "Ahead of Taiwan Elections, Presidential Candidate Defends Outreach to China," Washington Post, November 17, 2015. https://www.washingtonpost.com/news/worldviews/wp/2015/11/17/taiwans-ruling-party-now-the-underdog-a-q-a-with-its-presidential-candidate/.
- <sup>46</sup> Tsai Ing-wen, "Taiwan Faces the Future," Center for Strategic and International Studies, June 3, 2015. http://csis.org/event/tsai-ing-wen-2016.
- <sup>47</sup> Andy Yee, "For the Internet Age, Taiwan's ICT Industry Needs a New Model," *East Asia Forum*, February 25, 2014. http://www.eastasiaforum.org/2014/02/25/for-the-internet-age-taiwans-ict-industry-needs-a-new-model/.
- <sup>48</sup> Jonathan Lin, "Is Taiwan Too Economically Dependent on China?" *American Chamber of Commerce* (Taipei), 2011. http://www.amcham.com.tw/topics-archive/topics-archive-2011/vol-41-no-11/3459-is-taiwan-too-economically-dependent-on-china.
- <sup>49</sup> Liu Pei-chen, "Red Supply Chain Threatens Taiwan's Electronics Industry," *Want China Times*, June 26, 2015. http://www.wantchinatimes.com/news/content?id=20150626000039&cid=1703.
- <sup>50</sup> Tsai Ing-wen, "Taiwan Faces the Future," Center for Strategic and International Studies, June 3, 2015. http://csis.org/event/tsai-ing-wen-2016.
- 51 Tsai Ing-wen, "Taiwan Faces the Future," Center for Strategic and International Studies, June 3, 2015. http://csis.org/event/tsai-ing-wen-2016.
- <sup>52</sup> Tsai Ing-wen, "Taiwan Faces the Future," *Center for Strategic and International Studies*, June 3, 2015. http://csis.org/event/tsai-ing-wen-2016.
- <sup>53</sup> Want China Times, "DPP Peddles Protectionism as Progressive Politics," May 11, 2015. http://www.wantchinatimes.com/news/content?id=20150511000008&cid=1701.
- <sup>54</sup> Trading Economics, "Taiwan GDP Growth Rate." http://www.tradingeconomics.com/taiwan/gdp-growth.
- <sup>55</sup> Central News Agency (Taiwan), "Citibank Cuts Taiwan's 2015 GDP Growth Forecast to 0.6%," China Post (Taiwan), December 9, 2015. http://www.chinapost.com.tw/taiwan-business/2015/12/09/453038/Citibank-cuts.htm.
- <sup>56</sup> Taiwan Directorate-General of Budget, Accounting and Statistics via CEIC database.
- <sup>57</sup> Taiwan Directorate-General of Budget, Accounting and Statistics via CEIC database.
- <sup>58</sup> Crystal Hsu, "AmCham Warns of Over-Reliance on Trade with China," *Taipei Times*, June 9, 2011. http://www.taipeitimes.com/News/front/archives/2011/06/09/2003505319.
- <sup>59</sup> Rickey Yeh, "Why the KMT Failed in Taiwan's Local Elections," *Diplomat* (Tokyo), December 9, 2014. http://thediplomat.com/2014/12/why-the-kmt-failed-in-taiwans-local-elections-2/.
- <sup>60</sup> Chuing Prudence Chou, "Education in Taiwan: Taiwan's Colleges and Universities," *Brookings Institution*, November 2014. http://www.brookings.edu/research/opinions/2014/11/taiwan-colleges-universities-chou.
- <sup>61</sup> Chen Wei-han, "DPP to Push for Workers' Rights, Higher Wages: Tsai," *Taipei Times*, May 2, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/05/02/2003617298.
- <sup>62</sup> Yuan-Ming Chiao, "KMT's Hung Proposes Tax-Deductible Increase in Wages to Boost Growth," *China Post* (Taiwan), August 17, 2015. http://www.chinapost.com.tw/taiwan/national/presidential-election/2015/08/17/443482/KMTs-Hung.htm.
- <sup>63</sup> Jay Bryson, "Taiwanese Economy Dodges Recession in Q3," FXStreet, October 30, 2015. http://www.fxstreet.com/analysis/taiwanese-economy-dodges-recession-in-q3/2015/10/30/.

- <sup>64</sup> Econo Times, "Taiwan Inflation Figures Bottom Out," November 6, 2015. http://www.econotimes.com/Taiwan-inflation-figures-bottom-out-112615.
- <sup>65</sup> John Liu, "Taiwan Ranks 54th in the World for Cost of Living," *China Post* (Taiwan), January 21, 2015. http://www.chinapost.com.tw/taiwan/intl-community/2015/01/21/427046/Taiwan-ranks.htm.
- <sup>66</sup> John Liu, "Taiwan Ranks 54th in the World for Cost of Living," *China Post* (Taiwan), January 21, 2015. http://www.chinapost.com.tw/taiwan/intl-community/2015/01/21/427046/Taiwan-ranks.htm.
- <sup>67</sup> Taiwan Ministry of Interior via CEIC database.
- <sup>68</sup> Alisha Haridasani, "Big Prices in Little Taipei: Why Is Property So Expensive in Taiwan's Capital?" CNN, April 22, 2015. http://www.cnn.com/2015/04/22/business/taiwan-taipei-expensive-housing-market/.
- <sup>69</sup> China Post (Taiwan), "Housing Sales Are Slowing in All Six Municipalities of Nation, Says Survey," October 21, 2015. http://www.chinapost.com.tw/taiwan/business/2015/10/21/448848/Housing-sales.htm.
- <sup>70</sup> Crystal Hsu, "Property Market Slump Is Likely to Continue: Survey," *Taipei Times*, October 23, 2015. http://www.taipeitimes.com/News/biz/archives/2015/10/23/2003630681.
- 71 Loa Iok-sin, "Tsai Details Social Housing Policy," *Taipei Times*, October 1, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/10/01/2003629006.
- <sup>72</sup> Loa Iok-sin, "Tsai Slams Eric Chu over Public Housing Policy Talk," *Taipei Times*, November 22, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/11/22/2003633062.
- <sup>73</sup> Loa Iok-sin, "Tsai Slams Eric Chu over Public Housing Policy Talk," *Taipei Times*, November 22, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/11/22/2003633062.
- <sup>74</sup> Lee Wo-chiang, "Taiwan Could Face Own 'Fiscal Cliff,'" *Taipei Times*, January 24, 2013. http://www.taipeitimes.com/News/editorials/archives/2013/01/24/2003553275.
- <sup>75</sup> Central News Agency (Taiwan), "Debt Obligations Near NT\$24 Rril.: TIER," *China Post* (Taiwan), July 15, 2015. http://www.chinapost.com.tw/taiwan/national/national-news/2015/07/15/440731/Debt-obligations.htm.
- <sup>76</sup> Tradingeconomics.com.
- <sup>77</sup> Stephanie Chao, "Hung Could Realize President's Pension Reform Dreams: DPP," *China Post* (Taiwan), July 15, 2015. http://www.chinapost.com.tw/taiwan/national/national-news/2015/07/15/440740/Hung-could.htm.
- <sup>78</sup> Central News Agency, "Tsai Criticized for Putting Forth 'Teflon Pension Reform," China Post (Taiwan), July 11, 2015. http://www.chinapost.com.tw/taiwan/national/national-news/2015/07/11/440422/Tsai-criticized.htm.
- <sup>79</sup> Central News Agency, "Tsai Criticized for Putting Forth 'Teflon Pension Reform," China Post (Taiwan), July 11, 2015. http://www.chinapost.com.tw/taiwan/national/national-news/2015/07/11/440422/Tsai-criticized.htm.
- 80 Radio Taiwan International, "Candidates Spar on Pension Reform," December 6, 2015. http://english.rti.org.tw/news/?recordId=38048.
- 81 Eric Huang, "Realistic Energy Policies for Taiwan," Diplomat (Tokyo), August 5, 2015. http://thediplomat.com/2015/08/realistic-energy-policies-for-taiwan/.
- <sup>82</sup> Aries Poon, Fanny Liu, and Jenny W. Hsu, "Taiwan's Move from Nuclear May Increase Power Costs," *Wall Street Journal*, April 28, 2014. http://www.wsj.com/articles/SB10001424052702304163604579528933173477504.
- 83 Austin Ramzy, "Amid Protests, Taiwan to Halt Work on Nuclear Plant," New York Times, April 28, 2014. http://sinosphere.blogs.nytimes.com/2014/04/28/amid-protests-taiwan-to-halt-work-on-nuclear-plant/.
- 84 World Nuclear Association, "Nuclear Power in Taiwan," August 2015. http://www.world-nuclear.org/info/Country-Profiles/Others/Nuclear-Power-in-Taiwan/.
- <sup>85</sup> Tim Ferry, "Phasing out Nuclear Power in Taiwan," *Taiwan Business Topics*, September 15, 2015. http://topics.amcham.com.tw/2015/09/phasing-out-nuclear-power-in-taiwan/.
- 86 Wall Street Journal, "Taiwan Chooses Vulnerability," July 22, 2015. http://www.wsj.com/articles/taiwan-chooses-vulnerability-1437607506.
- <sup>87</sup> Stacy Hsu, "Chu Takes Aim at Tsai's 'Nuclear-free Homeland," *Taipei Times*, October 29, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/10/29/2003631193.
- <sup>88</sup> China Post (Taiwan), "Government Did Not Bankroll Nuclear Power: Taipower," September 21, 2015. http://www.chinapost.com.tw/taiwan/national/national-news/2015/09/21/446400/Govt-did.htm.
- 89 Central News Agency, "DPP Head Tsai Ing-wen Promotes Energy-Saving," China Post (Taiwan), July 8, 2015. http://www.chinapost.com.tw/taiwan/national/national-news/2015/07/08/440169/DPP-head.htm.
- 90 Stephanie Chao, "Taipower To Be Torn Apart in Attempt to Improve Efficiency," China Post (Taiwan), July 17, 2015. http://www.chinapost.com.tw/taiwan/business/2015/07/17/440926/Taipower-to.htm.
- 91 Stacy Hsu, "Chu Takes Aim at Tsai's 'Nuclear-free Homeland," *Taipei Times*, October 29, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/10/29/2003631193.
- <sup>92</sup> Wei Lu and Marcus Chan, "In Global Innovation Race, Taiwan Is Tops in Patents, Israel Leads in R&D," Bloomberg Business, January 23, 2014. http://www.bloomberg.com/news/2014-01-22/in-global-innovation-race-taiwan-is-tops-in-patents-israel-leads-in-r-d.html.
- <sup>93</sup> Agence France-Presse, "Taiwan Looks to Innovative Start-Ups as It Revamps its Tech Image," *South China Morning Post*, June 2, 2015. http://www.scmp.com/news/china/economy/article/1815559/taiwan-looks-innovative-start-ups-it-revamps-its-tech-image.
- <sup>94</sup> Ralph Jennings and Julie Makinen, "HTC's Woes Reflect Taiwan's Troubles in High Tech," Los Angeles Times, September 23, 2015. http://www.latimes.com/business/technology/la-fi-htc-taiwan-20150923-story.html.
- 95 Keith Bradsher, "In Taiwan, Lamenting a Lost Lead," New York Times, May 12, 2013. http://www.nytimes.com/2013/05/13/business/global/taiwan-tries-to-regain-its-lead-in-consumer-electronics.html.
- <sup>96</sup> Keith Bradsher, "In Taiwan, Lamenting a Lost Lead," New York Times, May 12, 2013. http://www.nytimes.com/2013/05/13/business/global/taiwan-tries-to-regain-its-lead-in-consumer-electronics.html.

- <sup>97</sup> Cindy Sui, "Taiwan's Struggle to Become an Innovation Leader," *BBC*, September 18, 2013. http://www.bbc.com/future/story/20130918-taiwans-rocky-road-to-innovation.
- <sup>98</sup> Ralph Jennings and Julie Makinen, "HTC's Woes Reflect Taiwan's Trouble in High Tech," *Los Angeles Times*, September 23, 2015. http://www.latimes.com/business/technology/la-fi-htc-taiwan-20150923-story.html.
- <sup>99</sup> Ralph Jennings and Julie Makinen, "HTC's Woes Reflect Taiwan's Trouble in High Tech," *Los Angeles Times*, September 23, 2015. http://www.latimes.com/business/technology/la-fi-htc-taiwan-20150923-story.html.
- <sup>100</sup> Taiwan Ministry of Science and Technology via CEIC database.
- <sup>101</sup> Cindy Sui, "Taiwan's Struggle to Become an Innovation Leader," BBC, September 18, 2013. http://www.bbc.com/future/story/20130918-taiwans-rocky-road-to-innovation.
- <sup>102</sup> Ralph Jennings and Julie Makinen, "HTC's Woes Reflect Taiwan's Trouble in High Tech," Los Angeles Times, September 23, 2015. http://www.latimes.com/business/technology/la-fi-htc-taiwan-20150923-story.html.
- <sup>103</sup> Global Entrepreneurship Monitor, 2015.
- <sup>104</sup> Global Entrepreneurship Monitor, 2015.
- <sup>105</sup> Global Entrepreneurship Monitor, 2015.
- <sup>106</sup> Taiwan Today, "Taiwan Promotes Innovation, Entrepreneurship," February 4, 2015. http://taiwantoday.tw/ct.asp?xItem=227135&ctNode=2182.
- <sup>107</sup> Taiwan Today, "Taiwan Promotes Innovation, Entrepreneurship," February 4, 2015. http://taiwantoday.tw/ct.asp?xItem=227135&ctNode=2182.
- 108 Central News Agency, "KMT's Candidate Chu Introduces a String of Major Policy Initiatives," China Post (Taiwan), October 31, 2015. http://www.chinapost.com.tw/taiwan/local/taipei/2015/10/31/449618/KMTs-candidate.htm.
- Ralph Jennings and Julie Makinen, "HTC's Woes Reflect Taiwan's Trouble in High Tech," Los Angeles Times, September 23, 2015. http://www.latimes.com/business/technology/la-fi-htc-taiwan-20150923-story.html.
- <sup>110</sup> U.S. Department of the Treasury, *Report to Congress on International Economic and Exchange Rate Policies*, October 19, 2015. http://www.treasury.gov/resource-center/international/exchange-rate-policies/Pages/index.aspx.
- 111 U.S. Department of the Treasury, Report to Congress on International Economic and Exchange Rate Policies, October 19, 2015. http://www.treasury.gov/resource-center/international/exchange-rate-policies/Pages/index.aspx.
- 112 John Berthelsen, "Is Taiwan Hollowing Out?" Asia Times, July 26, 2003. http://www.atimes.com/atimes/China/EG26Ad02.html.
- <sup>113</sup> American Chamber of Commerce, "Boosting the Economy through FDI," *Taiwan Business Topics*, October 2015. http://topics.amcham.com.tw/2015/10/boosting-the-economy-through-fdi/.
- <sup>114</sup> American Chamber of Commerce, "Boosting the Economy through FDI," *Taiwan Business Topics*, October 2015. http://topics.amcham.com.tw/2015/10/boosting-the-economy-through-fdi/.
- <sup>115</sup> U.S. Department of the Treasury, Report to Congress on International Economic and Exchange Rate Policies, October 19, 2015. http://www.treasury.gov/resource-center/international/exchange-rate-policies/Pages/index.aspx.
- World Bank, "Doing Business 2016," October 27, 2015. http://www.doingbusiness.org/reports/global-reports/doing-business-2016.
- <sup>117</sup> World Bank, "Doing Business 2016," October 27, 2015. http://www.doingbusiness.org/reports/global-reports/doing-business-2016.
- 118 World Bank, "Doing Business 2016," October 27, 2015. http://www.doingbusiness.org/reports/global-reports/doing-business-2016.
- <sup>119</sup> American Chamber of Commerce, "2015 Taiwan White Paper," *Taiwan Business Topics*, June 2015. http://www.amcham.com.tw/white-papers-2.
- <sup>120</sup> U.S. Department of State, Taiwan Investment Climate Statement 2015, June 2015. http://www.state.gov/e/eb/rls/othr/ics/2015/241759.htm.
- <sup>121</sup> U.S. Department of State, Taiwan Investment Climate Statement 2015, June 2015. http://www.state.gov/e/eb/rls/othr/ics/2015/241759.htm.
- <sup>122</sup> American Chamber of Commerce, "2015 Taiwan White Paper," *Taiwan Business Topics*, June 2015. http://www.amcham.com.tw/white-papers-2.
- <sup>123</sup> U.S. Department of the Treasury, Report to Congress on International Economic and Exchange Rate Policies, October 19, 2015. http://www.treasury.gov/resource-center/international/exchange-rate-policies/Pages/index.aspx.
- <sup>124</sup> J.R. Wu and Faith Hung, "Update 2 Taiwan Export Orders Fall for 7th Month, Weak Demand from Japan, China," Reuters, November 20, 2015. http://www.reuters.com/article/2015/11/20/taiwan-economy-orders-idUSL3N13F2N020151120.
- <sup>125</sup> Julie Makinen, "China Has Been Showing Signs of Economic Slowdown, Trade Partners Say," *Los Angeles Times*, August 26, 2015. http://www.latimes.com/world/asia/la-fg-asia-markets-20150827-story.html.
- National Policy Foundation, "For Governing the Country: Eric Chu Believes in 'Strength in Simplicity," October 30, 2015.
   http://www.taiwannpfnews.org.tw/english/page.aspx?type=article&mnum=112&anum=16848.
   Elizabeth Hsu, "Cross-Strait Mutual Trust Vital to TPP, RCEP Bids: KMT Candidate," Focus Taiwan, December 27, 2015.
- http://focustaiwan.tw/news/aipl/201512270019.aspx.
- <sup>128</sup> National Policy Foundation, "For Governing the Country: Eric Chu Believes in 'Strength in Simplicity," October 30, 2015. http://www.taiwannpfnews.org.tw/english/page.aspx?type=article&mnum=112&anum=16848.
- <sup>129</sup> William Lowther, "Tsai Vows 'Consistent' Cross-Strait Ties," *Taipei Times*, June 5, 2015. http://www.taipeitimes.com/News/front/archives/2015/06/05/2003619951/2.
- <sup>130</sup> Tsai Ing-wen, "Taiwan Faces the Future," Center for Strategic and International Studies, June 3, 2015. http://csis.org/event/tsai-ing-wen-2016.
- <sup>131</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- 132 Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>133</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>134</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.

- 135 China's Taiwan Affairs Office of the State Council, "Free Landing" of Taiwanese on the Mainland Begins, July 1, 2015. http://www.gwytb.gov.cn/en/CrossstraitInteractionsandExchanges/201507/t20150702\_10164140.htm.
- <sup>136</sup> PricewaterhouseCoopers, "China's Impact on the Semiconductor Industry: 2015 Update," October 2015. http://www.pwc.com/gx/en/technology/pdf/china-semicon-2015-report1-3.pdf.
- <sup>137</sup> Fanny Liu, "Taiwan Export Orders Point to Stronger Global Demand," Wall Street Journal, July 21, 2015. http://www.wsj.com/articles/taiwan-export-orders-point-to-stronger-global-demand-1405942545.
- <sup>138</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>139</sup> Lauly Li, "Export Orders Fell 4 Percent Last Month," *Taipei Times*, May 21, 2015. http://www.taipeitimes.com/News/biz/archives/2015/05/21/2003618751.
- <sup>140</sup> Eva Dou, "Chinese Chip Maker Tsinghua Unigroup to Buy Stake in Taiwan's Powertech," Wall Street Journal, October 30, 2015. http://www.wsj.com/articles/chinese-chip-maker-tsinghua-unigroup-to-buy-stake-in-taiwans-powertech-1446207661.
- <sup>141</sup> Eva Dou, "Chinese Chip Maker Tsinghua Unigroup to Buy Stake in Taiwan's Powertech," Wall Street Journal, October 30, 2015. http://www.wsj.com/articles/chinese-chip-maker-tsinghua-unigroup-to-buy-stake-in-taiwans-powertech-1446207661.
- <sup>142</sup> Want China Times, "China's 'Red Supply' Could Threaten Taiwan's Semiconductor Sector," May 24, 2015. http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20150524000066&cid=1102.
- <sup>143</sup> Want China Times, "China's 'Red Supply' Could Threaten Taiwan's Semiconductor Sector," May 24, 2015. http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20150524000066&cid=1102.
- 144 Paul Mozur, "Taiwan Semiconductor Manufacturing to Open Own Plant in China," New York Times, December 7, 2015. http://www.nytimes.com/2015/12/08/business/international/taiwan-semiconductor-china-factory-chips.html.
- <sup>145</sup> J.R. Wu, "Taiwan's TSMC Plans New China Plant Worth \$3 Billion," Reuters, December 7, 2015. http://www.reuters.com/article/us-tsmc-china-idUSKBN0TQ0LI20151207#o6Af0oTSF4716ipK.97.
- <sup>146</sup> Guo Baogang, "Relations across the Taiwan Strait: Retrospective and Prospects for Future Development," July 13, 2015, 43. http://www.brookings.edu/~/media/events/2015/07/13-taiwan-strait/20150713\_taiwan\_relations\_transcript.pdf.
- <sup>147</sup> Ministry of Economic Affairs, Overseas Chinese and Foreign Investment Commission (Taiwan), *Monthly Report*, August 2015.
- <sup>148</sup> Daniel H. Rosen and Zhi Wang, "The Implications of China-Taiwan Economic Liberalization", *Peterson Institute for International Economics*, 2011, 29–32.
- <sup>149</sup> Ministry of Economic Affairs, Overseas Chinese and Foreign Investment Commission (Taiwan), Monthly Report, December 2014.
- 150 China Briefing (Dezan Shira & Associates), "The New Free Trade Zones Explained, Part IV: Fujian," May 27, 2015. http://www.china-briefing.com/news/2015/05/27/new-free-trade-zones-explained-part-iv-fujian.html.
- 151 Lawrence Chung, "Free-Trade Zone in Mainland China May Lead to Brain Drain in Taiwan, Say Analysts," South China Morning Post, April 23, 2015. http://www.scmp.com/news/china/economy/article/1773278/free-trade-zone-china-may-lead-brain-drain-taiwan-say-analysts.
- <sup>152</sup> Adam Tyrsett Kuo, "NT\$42 Bil. Saved through ECFA Early Harvest List: Ma," *China Post* (Taiwan), April 3, 2014. http://www.chinapost.com.tw/taiwan/national/national-news/2014/04/03/404352/NT\$42-bil.htm.
- 153 Economist, "A Different Kind of Free Trade Protest," June 28, 2010. http://www.economist.com/blogs/newsbook/2010/06/trade\_and\_politics\_between\_china\_and\_taiwan.
- 154 William Wan, "Ahead of Taiwan Elections, Presidential Candidate Defends Outreach to China," Washington Post, November 17, 2015. https://www.washingtonpost.com/news/worldviews/wp/2015/11/17/taiwans-ruling-party-now-the-underdog-a-q-a-with-its-presidential-candidate/.
- <sup>155</sup> Peng Hsien-chun, "TAO rejects renegotiating pact," *Taipei Times*, April 17, 2014. http://www.taipeitimes.com/News/front/archives/2014/04/17/2003588217.
- <sup>156</sup> Kerry Brown, Justin Hempson-Jones, and Jessica Pennisi, "The Economic Cooperation Framework Agreement (ECFA)," in *Investment Across the Taiwan Strait*, Chatham House, November 2010, 20–33; Alan Romberg, "Ma at Mid-term: Challenges for Cross-Strait Relations," *China Leadership Monitor* 33 (Summer 2010).
- <sup>157</sup> Taiwan's Ministry of Economic Affairs, Department of Statistics, *Structure of Domestic Production*, September 2015; Taiwan's Bureau of Statistics, *Employed Persons by Industry*, August 2015.
- <sup>158</sup> Ralph Jennings, "China, Taiwan Pull Back on Talks to Cut Import Tariffs," South China Morning Post (Hong Kong), April 19, 2015; Central News Agency (Taiwan), "Trade-in-Goods Pact with China Unlikely this Year: Duh," June 10, 2014.
- <sup>159</sup> JoAnn Fan, "The Economics of the Cross-Strait Services Agreement," *Diplomat* (Tokyo), April 18, 2014.
- <sup>160</sup> Democratic Progressive Party, "President Ma's Willful Misrepresentation of Facts Regarding Service Trade Agreement Controversy," June 27, 2014; JoAnn Fan, "The Economics of the Cross-Strait Services Agreement," *Diplomat* (Tokyo), April 18, 2014; Chen Yen-ting, "Block Service Trade Pact, Activists Urge," *Taipei Times*, March 5, 2014.
- 161 China's Taiwan Affairs Office of the State Council, Mainland Trade Association Opens Taiwan Office, June 2015. http://www.gwytb.gov.cn/en/CrossstraitTrade/201506/t20150617\_10053652.htm.
- 162 China's Taiwan Affairs Office of the State Council, China Reprimands U.S. over Taiwan Meeting, June 2015. http://www.gwytb.gov.cn/en/SpokespersonRemarks/201506/t20150611\_10010774.htm.
- 163 Economist, "Straitened Circumstances," November 14, 2015. http://www.economist.com/news/finance-and-economics/21678276-weaker-growth-exposes-downside-ties-china-straitened-circumstances.
- <sup>164</sup> U.S. Department of State, U.S. Relations with Taiwan, February 12, 2015. http://www.state.gov/r/pa/ei/bgn/35855.htm.
- <sup>165</sup> Elaine Hou, "Timing for Taiwan-US TIFA Talks Undecided: Official," *China Post* (Taiwan), April 15, 2015. http://www.chinapost.com.tw/taiwan/business/2015/04/15/433646/Timing-for.htm.
- <sup>166</sup> Elizabeth Hsu, "Cross-Strait Mutual Trust Vital to TPP, RCEP Bids: KMT Candidate," Focus Taiwan, December 27, 2015. http://focustaiwan.tw/news/aipl/201512270019.aspx.

- <sup>167</sup> U.S. Census Bureau, NAICS database (Washington, DC: U.S. Department of Commerce, Foreign Trade Division, November 2015). http://www.census.gov/foreign-trade/balance/c5700.html.
- <sup>168</sup> U.S. Department of State, U.S. Relations with Taiwan, February 12, 2015. http://www.state.gov/r/pa/ei/bgn/35855.htm.
- <sup>169</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>170</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>171</sup> Economist, "Straitened Circumstances," November 14, 2015. http://www.economist.com/news/finance-and-economics/21678276-weaker-growth-exposes-downside-ties-china-straitened-circumstances.
- <sup>172</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>173</sup> Bureau of Foreign Trade (Taiwan). *Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/*.
- <sup>174</sup> Shirley A. Kan, "Taiwan: Major U.S. Arms Sales since 1990," Congressional Research Service, August 29, 2014. https://www.fas.org/sgp/crs/weapons/RL30957.pdf.
- <sup>175</sup> Patricia Zengerle and David Brunnstrom, "Obama Administration Authorizes \$1.83-Billion Arms Sale to Taiwan," *Reuters*, December 17, 2015. http://www.reuters.com/article/us-usa-taiwan-arms-idUSKBN0TZ2C520151217.
- <sup>176</sup> U.S. Department of Commerce Bureau of Economic Analysis.
- <sup>177</sup> Elaine Hou, "Timing of Next Taiwan-U.S. TIFA Talks Undecided: Official," Focus Taiwan, April 14, 2014.
- <sup>178</sup> U.S. Office of Trade Negotiations, Ministry of Economic Affairs, *Introduction of Taiwan-U.S. TIFA*, December 25, 2014. https://www.moea.gov.tw/Mns/otn\_e/content/Content.aspx?menu\_id=6198.
- 179 Joshua Meltzer, "Taiwan's Economic Opportunities and Challenges and the Importance of the Trans-Pacific Partnership," Brookings Institution, January 2014. http://www.brookings.edu/~/media/research/files/papers/2013/09/30-taiwan-trans-pacific-partnership-meltzer/taiwan-trans-pacific-partnership-meltzer-012014.pdf.
- 180 Elaine Hou, "Timing of Next Taiwan-U.S. TIFA Talks Undecided: Official," Focus Taiwan, April 14, 2014.
- <sup>181</sup> Elaine Hou, "Taiwan, U.S. Aiming for TIFA Talks by Year End: U.S. Official," Focus Taiwan, June 2, 2015; *Taiwan Today*, "Ma Lauds Enhanced Taiwan-U.S. Cooperation," June 2, 2015.
- <sup>182</sup> American Institute in Taiwan, "United States and Taiwan Deepen Dialogue on Trade and Investment Priorities," October 2, 2015; Robert Holleyman, "Press Conference for the Ninth Trade and Investment Framework Agreement Council Meeting" (Taipei, Taiwan, October 1, 2015).
- <sup>183</sup> Central News Agency (Taiwan), "Taiwan to Stand Firm on US Pork Ractopamine Ban: Official," October 3, 2015; Shirley A. Kan and Wayne M. Morrison, "U.S.-Taiwan Relationship: Overview of Policy Issues," *Congressional Research Service*, December 11, 2014, 34–36; Central News Agency (Taiwan), "U.S. Raises Taiwan Pork Issues at WTO Meeting," September 18, 2014; and *Economist*, "Taiwan, America, and Meat Wars: Gored," March 8, 2012.
- <sup>184</sup> Jeffrey Wu, "Meat Issue Complicating BIA Talks with Taiwan: U.S. Trade Official," Focus Taiwan, October 1, 2015; Jeffrey Wu, "U.S. Welcomes Taiwan's Interest in Joining TPP: Trade Official," Focus Taiwan, October 1, 2015; and Tien Yu-ping and Lilian Wu, "U.S. Pork Not To Be Included in Upcoming TIFA Talks: Minister," Focus Taiwan, September 16, 2015.
- <sup>185</sup> Guo Yung-hsing, "The Problem with Pigs and the TPP," *Taipei Times*, November 12, 2015. http://www.taipeitimes.com/News/editorials/archives/2015/11/12/2003632243/2.
- <sup>186</sup> Elizabeth Hsu, "Cross-Strait Mutual Trust Vital to TPP, RCEP Bids: KMT Candidate," Focus Taiwan, December 27, 2015. http://focustaiwan.tw/news/aipl/201512270019.aspx.
- <sup>187</sup> Debby Wu, "Tsai Talks Realpolitik and Pork," *Nikkei Asian Review*, December 27, 2015. http://asia.nikkei.com/Politics-Economy/Policy-Politics/Tsai-talks-realpolitik-and-pork.
- <sup>188</sup> Lu Hsin-hui and Romulo Huang, "DPP to Study Ways to Clear Path for TPP Participation: Tsai," Focus Taiwan, July 20, 2015. http://focustaiwan.tw/news/aipl/201507200024.aspx.
- <sup>189</sup> Joe Thomas Karackattu, "Exciting Times for Taiwan," *Institute for Defense Studies and Analyses*, January 13, 2012.
  http://www.idsa.in/idsacomments/ExcitingtimesforTaiwan\_jtkarackattu\_130112; Sean Lin, "2016 Elections: Candidates Debate Pork, Trade, China," *Taipei Times*, December 28, 2015.
- 190 Joshua Meltzer, "Taiwan's Economic Opportunities and Challenges and the Importance of the Trans-Pacific Partnership," Brookings Institution, January 2014, 6. http://www.brookings.edu/~/media/research/files/papers/2013/09/30-taiwan-trans-pacific-partnership-meltzer/taiwan-trans-pacific-partnership-meltzer-012014.pdf
- <sup>191</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>192</sup> Joshua Meltzer, "Taiwan's Economic Opportunities and Challenges and the Importance of the Trans-Pacific Partnership," *Brookings Institution*, January 2014, 2. <a href="http://www.brookings.edu/~/media/research/files/papers/2013/09/30-taiwan-trans-pacific-partnership-meltzer/taiwan-trans-pacific-partnership-meltzer-012014.pdf">http://www.brookings.edu/~/media/research/files/papers/2013/09/30-taiwan-trans-pacific-partnership-meltzer-012014.pdf</a>.
- 193 Economist Intelligence Unit, "Taiwan: Going South Again," June 12, 2013.
- 194 Joshua Meltzer, "Taiwan's Economic Opportunities and Challenges and the Importance of the Trans-Pacific Partnership," Brookings Institution, January 2014, 3. http://www.brookings.edu/research/papers/2013/09/30-taiwan-trans-pacific-partnership-meltzer.
- 195 Joshua Meltzer, "Taiwan's Economic Opportunities and Challenges and the Importance of the Trans-Pacific Partnership," Brookings Institution, January 2014, 3. http://www.brookings.edu/~/media/research/files/papers/2013/09/30-taiwan-trans-pacific-partnership-meltzer/taiwan-trans-pacific-partnership-meltzer-012014.pdf.
- <sup>196</sup> Joshua Meltzer, "Taiwan's Economic Opportunities and Challenges and the Importance of the Trans-Pacific Partnership," *Brookings Institution*, January 2014, 6. <a href="http://www.brookings.edu/~/media/research/files/papers/2013/09/30-taiwan-trans-pacific-partnership-meltzer/taiwan-trans-pacific-partnership-meltzer-012014.pdf">http://www.brookings.edu/~/media/research/files/papers/2013/09/30-taiwan-trans-pacific-partnership-meltzer-012014.pdf</a>.
- 197 Taipei Times, "Tsai Debuts Plan to Bolster India, ASEAN Relations," September 23, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/09/23/2003628388.
- <sup>198</sup> Taipei Times, "Tsai Debuts Plan to Bolster India, ASEAN Relations," September 23, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/09/23/2003628388.

- <sup>199</sup> Taipei Times, "Tsai Debuts Plan to Bolster India, ASEAN Relations," September 23, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/09/23/2003628388; Sophia Yeh and Lilian Wu, "DPP Candidate Unveils 'New Southward Policy," Focus Taiwan, September 22, 2015. http://focustaiwan.tw/news/aIPL/201509220026.aspx.
- <sup>200</sup> Jamil Anderlini, "China-Taiwan Ties in Focus as Xi Jinping Meets KMT Chairman," Financial Times, May 4, 2015. http://www.ft.com/intl/cms/s/0/e7848f5c-f238-11e4-b914-00144feab7de.html#axzz3s379rg9S.
- <sup>201</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>202</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>203</sup> Ben Blanchard, "Taiwan President Says Should Remember Good Things Japan Did," Reuters, October 25, 2015. http://www.reuters.com/article/2015/10/25/us-taiwan-china-idUSKCNOSJ03Y20151025#00M8Qwk3HyPt56CY.97/; Kerry Brown, Justin Hempson-Jones, and Jessica Pennisi, "Investment across the Taiwan Strait," Chatham House, November 2010. http://www.kerrybrown.co.uk/files/website-8.pdf.
- <sup>204</sup> Taiwan Embassy, "Taiwan and Japan Signed an Arrangement on Investment Liberalization, Promotion and Protection Cooperation," October 13, 2011. http://www.taiwanembassy.org/ct.asp?xItem=225298&ctNode=8585&mp=157.
- <sup>205</sup> Shih Hsiu-chuan, "Taiwan, Japan Ink Fisheries Agreement," *Taipei Times*, April 11, 2013. http://www.taipeitimes.com/News/front/archives/2013/04/11/2003559323.
- <sup>206</sup> Stacy Hsu, "Eric Chu Announces Plan to Travel to US," *Taipei Times*, October 22, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/10/22/2003630649.
- <sup>207</sup> Lee Mei-yu, "Tsai Ing-wen Describes Japan Trip as 'Fruitful,'" Focus Taiwan, October 9, 2015. http://focustaiwan.tw/news/aipl/201510090025.aspx.
- <sup>208</sup> Shannon Tiezzi, "What Taiwan-Japan Relations Might Look Like in 2016," *Diplomat* (Tokyo), October 9, 2015. http://thediplomat.com/2015/10/what-taiwan-japan-relations-might-look-like-in-2016/.
- Asian Development Bank, "Free Trade Agreements," December 8, 2015. https://aric.adb.org/fta-country.
   Shih Hsiu-chuan, "Ma Blames China for FTA Gap," Taipei Times, December 28, 2014.
- http://www.taipeitimes.com/News/taiwan/archives/2014/12/28/2003607781.
- <sup>211</sup> Lucy Hornby and Luc Cohen, "No Ties? No Problem as China Courts Taiwan's Remaining Allies," Reuters, August 6, 2013. http://www.reuters.com/article/2013/08/06/us-china-centralamerica-idUSBRE97514C20130806.
- <sup>212</sup> Nicolas White, Jieming Chu, and Kaelyn Lowmaster, "ANZTEC and Taiwan's Quest for Economic Integration," Center for Strategic and International Studies, August 1, 2013. http://csis.org/publication/anztec-and-taiwans-quest-economic-integration.
- <sup>213</sup> Shih Hsiu-chuan, "Ma Blames China for FTA Gap," *Taipei Times*, December 28, 2014. http://www.taipeitimes.com/News/taiwan/archives/2014/12/28/2003607781.
- <sup>214</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>215</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://cus93.trade.gov.tw/ENGLISH/FSCE/.
- <sup>216</sup> Anthony Fensom, "Taiwan-Singapore FTA," *Diplomat* (Tokyo), November 8, 2013.
- <sup>217</sup> Joshua Meltzer, "Taiwan's Economic Opportunities and Challenges and the Importance of the Trans-Pacific Partnership," *Brookings* Institution, January 2014, 9. http://www.brookings.edu/~/media/research/files/papers/2013/09/30-taiwan-trans-pacific-partnershipmeltzer/taiwan-trans-pacific-partnership-meltzer-012014.pdf.
- <sup>218</sup> Anthony Fensom, "Taiwan-Singapore FTA," Diplomat (Tokyo), November 8, 2013. http://thediplomat.com/2013/11/taiwan-singaporefta/.
- <sup>219</sup> Mo Yan-chih, "Ma's Re-Inauguration: Ma Speech Focuses on Economic Growth," *Taipei Times*, May 21, 2012. http://www.taipeitimes.com/News/front/archives/2012/05/21/2003533336.
- <sup>220</sup> Ben Bland, "Taiwan Officials Puncture China Détente," Financial Times, November 11, 2015. http://www.ft.com/intl/cms/s/0/8c496934-884f-11e5-8a12-b0ce506400af.html#axzz3wI6D5BCr.
- <sup>221</sup> Bureau of Foreign Trade (Taiwan). Trade Statistics. http://www.trade.gov.tw/English/FSCE/.
- <sup>222</sup> Joshua Meltzer, "Taiwan's Economic Opportunities and Challenges and the Importance of the Trans-Pacific Partnership," *Brookings* Institution, January 2014. http://www.brookings.edu/~/media/research/files/papers/2013/09/30-taiwan-trans-pacific-partnershipmeltzer/taiwan-trans-pacific-partnership-meltzer-012014.pdf.
- <sup>223</sup> Democratic Progressive Party, "DPP Economic Advisors," Washington, DC Representative Office. <sup>224</sup> Democratic Progressive Party, "DPP Economic Advisors," Washington, DC Representative Office.
- <sup>225</sup> Debby Wu, "Taiwan Opposition Adviser Rebuff's Idea that China Ties Are Answer to Slow Growth," Nikkei Asian Review, May 20, 2014. http://asia.nikkei.com/Politics-Economy/Policy-Politics/Taiwan-opposition-adviser-rebuffs-idea-that-China-ties-are-answer-toslow-growth.
- <sup>226</sup> Debby Wu, "Taiwan Opposition Adviser Rebuff's Idea that China Ties Are Answer to Slow Growth," Nikkei Asian Review, May 20, 2014. http://asia.nikkei.com/Politics-Economy/Policy-Politics/Taiwan-opposition-adviser-rebuffs-idea-that-China-ties-are-answer-to-
- <sup>227</sup> Democratic Progressive Party, "Economic Policy Overview and Issues," Washington, DC Representative Office.
- <sup>228</sup> Democratic Progressive Party, "DPP Economic Advisors," Washington, DC Representative Office.
- <sup>229</sup> American Chamber of Commerce, "Interview: Hu Sheng-cheng's Views on the Economy," Taipei, Taiwan, October 2009. http://www.amcham.com.tw/topics-archive/topics-archive-2009/vol-39-no-10/2855-interview-hu-sheng-chengs-views-on-the-economy.
- <sup>230</sup> American Chamber of Commerce, "Interview: Hu Sheng-cheng's Views on the Economy," Taipei, Taiwan, October 2009. http://www.amcham.com.tw/topics-archive/topics-archive-2009/vol-39-no-10/2855-interview-hu-sheng-chengs-views-on-the-economy.
- <sup>231</sup> Democratic Progressive Party, "DPP Economic Advisors," Washington, DC Representative Office.
- <sup>232</sup> Amber Chung, "New FSC Chief Vows to Rebuild Trust in Watchdog," *Taipei Times*, August 5, 2006. http://www.taipeitimes.com/News/biz/archives/2006/08/05/2003321929.

- 233 Katherin Hille, "Taiwan PM under Pressure to Quit," Financial Times, January 14, 2007. http://www.ft.com/intl/cms/s/0/17fe75c8-a3fd-11db-bec4-0000779e2340.html#axzz3s379rg9S.
- <sup>234</sup> Open Source Center, "Taiwan: Selected Liberty Times Articles with English Machine Translation 13 October," October 13, 2015, CHO2015101405972494.
- 235 Open Source Center, "Taiwan: Selected Liberty Times Articles with English Machine Translation 13 October," October 13, 2015, CHO2015101405972494.
- <sup>236</sup> Democratic Progressive Party, "DPP Economic Advisors," Washington, DC Representative Office.
- <sup>237</sup> Open Source Center: "CNA: DPP Will Seek to Make Taiwan Regional Biomedical Center: Tsai," October 27, 2015, CHR2015102748718442.
- <sup>238</sup> Jake Chung, "Tsai Unveils Ambitious National Defense Policy," Taipei Times, October 30, 2015. http://www.taipeitimes.com/News/taiwan/archives/2015/10/30/2003631276.
- <sup>239</sup> Democratic Progressive Party, "DPP Economic Advisors," Washington, DC Representative Office.
- <sup>240</sup> Camaron Kao, "Taiwan's Global Competitiveness Ranking Declines by Four Notches," *Taipei Times*, May 30, 2013. http://www.taipeitimes.com/News/front/archives/2013/05/30/2003563518.
- <sup>241</sup> Outstanding Magazine, "Avoiding a Crisis of No Progress, the Red Supply Chain, and a Hopeful Renewal of Innovation," October 30, 2015. Staff translation. <a href="http://mag.cnyes.com/Content/20151030/00065EE6B0F943F2B55D0C4D199F0554.shtml">http://mag.cnyes.com/Content/20151030/00065EE6B0F943F2B55D0C4D199F0554.shtml</a>.
- <sup>242</sup> Outstanding Magazine, "Avoiding a Crisis of No Progress, the Red Supply Chain, and a Hopeful Renewal of Innovation," October 30, 2015. Staff translation. <a href="https://mag.cnyes.com/Content/20151030/00065EE6B0F943F2B55D0C4D199F0554.shtml">http://mag.cnyes.com/Content/20151030/00065EE6B0F943F2B55D0C4D199F0554.shtml</a>.