Indonesia 2000-2006:  
Walking the Fiscal and Monetary Policy Tightrope
During the Asian Financial Crisis in 1997, Indonesia (the world’s fourth largest country with a population of 245 million)\(^1\) suffered greatly as its GDP decreased 13.5% in 1997.\(^2\) Indonesia’s move from a managed floating exchange rate to a free floating exchange rate on August 14, 1997 marked the beginning of a new era in their economic policy. Since then, Indonesia has made tremendous strides to improve its economic position and restore stability. One of the highlights of Indonesia’s progress was the completion of paying off its IMF debt by December 2006. Today, Indonesia still faces many economic issues; however, Indonesia is now equipped with a full arsenal of fiscal and monetary policies at its disposal and is in a much better position to correct these issues. We will focus on Indonesia from 2000 to today and make policy recommendations to ensure Indonesia continues to move forward and does not look back to the dark days of the late 1990s.

**Recent Macroeconomic Performance 2000–2006\(^3\)**

**GDP:** GDP increased 6.2% from 2005 to 2006 in real dollars\(^4\). The real dollar growth was primarily due to a favorable oil market (Indonesia is a major producer). From 2000 to 2005, GDP increased at a compound annual growth rate of 14.4% in nominal dollars. In terms of real dollars, GDP grew at a compound annual growth rate of 4.7%. This is on par with regional growth. (See Exhibit 1)

**Real Money Supply:** Inflation increased 13.2% in 2006\(^5\) up from 10.5% in 2005. Money Supply (M1) grew 10.7% in 2005. Again, many of the indicators point to the global increase in oil prices as being the main cause of inflation. Between 2000 and 2005, the money supply (M1) grew 74%, while inflation grew 55%. This discrepancy would lead one to believe that the Rupiah would have depreciated; all else being equal.

**Exchange Rate:** The Indonesian Rupiah *actually* appreciated by 5.6% in value against the US Dollar in 2006. From 2000 to today, the Rupiah has appreciated against the US dollar by 4.5%. Since August 1997, Indonesia has had a floating exchange rate and its currency truly has floated. (See Exhibit 2) This coupled with Indonesia’s membership in ASEAN + 3 has helped support the currency or at least prevented arbitrageurs from attacking.

**Interest Rate:** The discount rate in Indonesia is 8.75% as of April 4, 2007\(^6\). The rate has decreased from 9.75% at the end of 2006 and there have been 11 consecutive cuts in the benchmark rate. Additionally, Bank Indonesia is expected to continue to cut rates throughout 2007 and 2008 until the discount rate is in the range of 8.0%-8.5%. The rationale for the cuts is Indonesia’s desire to spur domestic growth especially in low income residential housing.

**Unemployment:** Unemployment increased from 10.3% in 2005 to 12.6% in 2006\(^7\). Unemployment is up from 6.4% in 1999. This clearly is due to the Indonesian central bank’s stated focus on inflation. Additionally, over 17% of the population is believed to be living before the poverty line.\(^8\)

**Current Account:** Indonesia’s current account has been positive until 2005 when it was nearly break-even. In 2005, the current account had a surplus of $929 million USD,
comprised of a trade surplus of $22 billion USD, $10 billion USD services deficit, $12 billion USD income deficit, and $1 billion USD transfers surplus. (See Exhibit 3)

Since 2000, Indonesia has been running a consistent annual trade surplus of $20-25 billion USD. Over the past 5 years, exports have been growing at 6% annually while imports have grown at 10% annually. The international rise in oil prices has offset the large rise in imports during the last two years. If one excludes mineral products from exports, then one sees a trade account deficit this year. (See Exhibit 4) The important implication is that Indonesia may see a negative trade account as oil prices decrease, but this is not unusual for an emerging country. It is critical when Indonesia runs a trade deficit that they make wise import decisions. (See Exhibit 5) Importing machinery and minerals helps Indonesia drive towards developing an economy for future.

Indonesia’s services deficit has been roughly flat at approximately $11 billion USD, but the income account has risen from $8 billion USD to $11.8 billion USD. The reason for the deficit is the payments on debts owed by the country are much greater (and at a higher interest rate) than the income the country receives on the assets it holds. Due to Indonesia’s high debt and interest rate, the country must pay investors more than the country takes in from its investments.

Its main trading partners are Japan, US, Singapore, Korea and China. Thus, Indonesia’s fortunes are very closely tied to the rest of Asia.

**Government Expenditure:** Total government spending in the 2006 government budget was 560 trillion Rupiah, with about 64% of those funds spent by the central government and the balance of 36% spent by regional authorities. While government expenditures do exceed total government revenue, the government budget deficit as a percentage of GDP in 2006 was approximately 0.6%, and is likely to become smaller as the government has mandated a balanced budget (for context, U.S. deficit as percentage of GDP is around 4.5%). (See Exhibit 6)

While absolute government expenditure since 2000 has risen in all sectors, military and defense spending has increased the most, with a 24% compound annual growth rate between 2000 and 2004. A similar rise in military spending has continued in 2005 and 2006. Notably, the Economist Intelligence Unit reports that the official state budget only captures about 30% of total military spending, with a majority coming from secondary sources. By contrast, critics contend that key social welfare sectors like health have seen a proportionate decline in government spending since the 1997 crisis, with Indonesia lagging Asian peers in this area.

**Tax Revenue:** Tax revenue as a percentage of government revenue had recovered to 78% in 2004 from a low of 55% in 1999. In 2006, this percentage held at 75%. (See Exhibit 7)

The effective tax rate (tax revenue divided by GDP) was 12.0% in 2005. The marks a slight decrease from 2004’s effective tax rate of 12.1%, but it is markedly above 2001’s
rate of 11.0%. Part of the reason for the increased effective tax rate is due to Indonesia’s higher rate of tax collection in recent years.

**Politics:** Indonesia has increasingly been considered a country with significant internal security risk. Its large population and ethnic diversity has led to numerous issues around communal violence. High profile terrorist incidents in 2003 and 2004 (Bali and Australian embassy bombings) have increased world pressure on Indonesia to manage the perceived rise of Islamic fundamentalism. Indonesia’s relationship with the U.S. on a military level has increased in parallel with the global “War on Terror.”

In general, the Indonesian political situation has reached some level of stability with no changes expected in the near term. However, there are concerns that growing wealth disparities in a country the size of Indonesia could have dramatic effects and potential civil unrest if they continue. All of these factors continue to hang over Indonesia as businesses consider FDI.

**Major issues in Indonesia economy**

While certainty Indonesia faces many economic dilemmas, we believe Indonesia should focus on the following 3 major issues:

1. **GDP growth.** High unemployment is limiting the economy from operating at full employment. Thus, GDP is being limited. At the same time, GDP’s recent growth is partly held up by mineral products’ increased value on the world market. Hence, GDP growth is not as significant as the data initially suggests.

2. **Inflation.** Part of the reason for the lower GDP growth is the Central Bank’s insistence on controlling inflation. At the same time, the money supply grew more rapidly than inflation, meaning that the real money supply actually increased. This leads to an expectation of future inflation.

3. **Current Account.** While Indonesia has a trade surplus, the country suffers from a significant deficit in the income and service accounts. Again, the mineral products help to prop-up the trade surplus. Another issue is that Japan is the key import-export partner of Indonesia. Therefore, that country’s performance will affect Indonesia’s economy.

Exhibit 8 illustrates that Indonesia is currently in “Zone 4” in the Economic Zone of Discomfort Model. Given Indonesia’s current state, the country should strive to reach full employment, real GDP growth, and a slightly negative current account balance as it is continue to develop.

**Policy Recommendations**

Our policy recommendations are broken into two parts: fiscal and monetary. These two sections will provide the inputs that we will use in our overall recommendation for walking the inflation–unemployment tight rope.
**Fiscal Policy**

In terms of fiscal policy, we recommend that Indonesia reduces taxes. While the tax code is complex, the current effective tax rate in aggregate is 12.0%. We recommend reductions to their effective tax rate, initially to 11.5%. While doing so, Indonesia should ensure that debt-to-GNI ratio is not greater than 60% (it is currently at 56.5%). We expect the reduced taxes should increase aggregate demand in the short term. The reduction in taxes increases demand greater than current output. The economy will expand and output increases until the output equals aggregate demand. (See Exhibit 9).

This policy obviously increases GDP, but we also expect it to help employment rates as the greater output requires additional resources to create it. However, we do not expect inflation to occur as a result since the economy is not at full employment. Thus, we expect the additional output to be created using “slack” costs instead of driving wages higher. In the foreign exchange market, we expect the Indonesian Rupiah to appreciate. An appreciation in the foreign exchange market will help the trade account balance as foreign goods become less expensive to import.

**Monetary Policy**

On the monetary policy side, our recommendation focuses on tightening the real money supply, which is essential if Indonesia wants to curb inflation. Since 2000, the nominal money supply has grown by 74% while prices have increased by 55%. The 19% delta induces the real money supply’s growth (See Exhibit 10). Our policy would reverse the trend by limiting money supply growth to be less than inflation initially and then matching inflation once inflation is under control (i.e., less than 6% annually). (See Exhibit 11)

The monetary policy will obviously reduce inflation. However, it will also have other effects on the economy. First, the Rupiah should appreciate as expectations of deflation drive the appreciation farther than expected. Then as prices adjust, subsequent depreciation will cause the currency to settle between the initial position and the initial response. The GDP growth in nominal terms will slow as inflation slows. In real terms, though, we expect to see some decrease in GDP as a tighter money supply means less money is available for investment because interest rates will rise, thereby increasing the country’s propensity to save since investment projects will have a higher hurdle rate. The effect on the trade account is ambiguous. A stronger Rupiah and lower output will reduce exports. However, the imports may go up or down depending on the quantity now imported and their price.

**Policy Implementation and Limitations**

Our recommendation for Indonesia is to use the fiscal and monetary policies as twin levers in order to grow the economy. We see output growth as our first priority because the inflation is not growing as quickly as GDP growth and reducing unemployment can yield benefits across the economy. Using the fiscal expansionary policy described above should increase output and appreciate the currency. Once inflation is showing trends of
becoming a significant problem, using a measure such as twice region peers’ inflation, then our policy priority should focus on reducing monetary supply. The result of using these two policies in tandem is that output will surge forward during a period of fiscal policy expansion and then contract slightly during periods of focusing on inflation contraction. If these two levers are used judicially, we hope to grow the economy and strengthen the currency. This is the tightrope Indonesia must walk. (See Exhibit 12).

However, a major limitation on this policy is if the two levers get out of sync with each other. If a fiscal policy expansion is not followed by a monetary supply contraction, then we could fall off the tightrope and have significant inflation. Alternatively, the monetary contraction may kill economic growth, leading to a recession. Thus, Indonesia must be committed to doing both policies in tandem or else our recommendation would not work.

Another potential limitation is our assumption about oil prices. As an oil producing nation, Indonesia has benefited from raising prices in crude oil. Throughout our models, we have assumed oil prices will remain constant or even possibly increase. If oil prices were to drop from its current price of $70 per barrel to a level before $50, Indonesia (and many other countries) would feel an immediate impact. Indonesia’s GDP would most likely contract and unemployment would most likely rise. On the positive side, Indonesia would most likely see a lower inflation rate in a period of declining oil prices. In a case of rising oil policies, our fiscal policy recommendations would remain. We would not, however, recommend a tightening of the money supply as inflation would already be moving to more normalized levels.

The final limitation of our policy is the ability to handle a severe external shock, such as a natural disaster. In this case, the goals that our policy is trying to achieve become irrelevant; the overall goal changes to meeting the physical needs of the citizens. In these instances, more radical fiscal and monetary policies may be necessary to ensure the willing being and stability of the country through a time of crisis.

**Conclusion**

We believe Indonesia’s economy has turned a corner and is poised to continue to move forward. By focusing on Indonesia’s major issues (GDP growth, unemployment, and current account balance), the country can continue to grow and prosper. Additionally, Indonesia must continue to demonstrate to the rest of the world that it is serious about its economic policies and the stability of the country. With the continuation of a floating currency, rational economic policies, and a stable government, Indonesia will continue to become a larger economic player in Southeast Asia.
Exhibits

Exhibit 1: Select Macroeconomic Comparables

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Real GDP Growth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>4.4%</td>
<td>4.7%</td>
<td>5.1%</td>
<td>5.6%</td>
<td>6.2%</td>
</tr>
<tr>
<td>ASEAN</td>
<td>4.8%</td>
<td>5.4%</td>
<td>6.1%</td>
<td>5.6%</td>
<td>5.8%</td>
</tr>
<tr>
<td><strong>Inflation Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>10.0%</td>
<td>6.8%</td>
<td>6.1%</td>
<td>10.5%</td>
<td>13.2%</td>
</tr>
<tr>
<td>ASEAN</td>
<td>7.3%</td>
<td>5.1%</td>
<td>4.8%</td>
<td>7.4%</td>
<td>8.1%</td>
</tr>
<tr>
<td><strong>Interest Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>13.6%</td>
<td>7.1%</td>
<td>6.7%</td>
<td>11.8%</td>
<td>9.7%</td>
</tr>
<tr>
<td>ASEAN</td>
<td>5.7%</td>
<td>5.3%</td>
<td>5.0%</td>
<td>5.7%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

Source: Association of Southeast Asian Nations
Exhibit 2: Foreign Exchange Rates

![Graph showing foreign exchange rates over time]

Exhibit 3: Current Account Detail

<table>
<thead>
<tr>
<th>(millions USD)</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports</td>
<td>65,408</td>
<td>57,365</td>
<td>59,165</td>
<td>64,109</td>
<td>70,767</td>
<td>86,179</td>
<td>5.7%</td>
</tr>
<tr>
<td>Imports</td>
<td>(40,365)</td>
<td>(34,668)</td>
<td>(35,652)</td>
<td>(39,546)</td>
<td>(50,615)</td>
<td>(63,856)</td>
<td>9.6%</td>
</tr>
<tr>
<td>Trade Balance</td>
<td>25,042</td>
<td>22,696</td>
<td>23,513</td>
<td>24,563</td>
<td>20,152</td>
<td>22,323</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Services Account</td>
<td>(10,423)</td>
<td>(10,380)</td>
<td>(10,382)</td>
<td>(12,108)</td>
<td>(8,811)</td>
<td>(10,803)</td>
<td>0.7%</td>
</tr>
<tr>
<td>Income Account</td>
<td>(8,443)</td>
<td>(6,936)</td>
<td>(7,048)</td>
<td>(6,217)</td>
<td>(10,917)</td>
<td>(11,849)</td>
<td>7.0%</td>
</tr>
<tr>
<td>Transfers Account</td>
<td>1,816</td>
<td>1,520</td>
<td>1,740</td>
<td>1,869</td>
<td>1,139</td>
<td>1,258</td>
<td>-7.1%</td>
</tr>
<tr>
<td>Current Account</td>
<td>7,992</td>
<td>6,901</td>
<td>7,824</td>
<td>8,107</td>
<td>1,563</td>
<td>929</td>
<td>-35.0%</td>
</tr>
</tbody>
</table>
Exhibit 4: Imports by Category

Exhibit 5: Trade Account Trends
Exhibit 6: Government Expenditures

Exhibit 7: Tax as a Percentage of Governmental Revenues
Exhibit 8: Zones of Discomfort

- CA is slightly negative (~500MM USD)
- Economy is at full employment
- Excessive CA surplus
- Underemployment

Exhibit 9: Output Market Equilibrium (DD Schedule)

- $D = Y$
- $(t=11\%)$
- $(t=12\%)$
Exhibit 10: Current Asset Market Equilibrium (AA Schedule)

Interest rate parity curve shifts outward due to expected inflation.

Exhibit 11: Proposed Asset Market Equilibrium (AA Schedule)

Interest rate parity curve shifts inward due to expected appreciation.
Exhibit 12: Recommended Action Steps (AA-DD Curve)

1 https://www.cia.gov/cia/publications/factbook/geos/id.html
2 http://en.wikipedia.org/wiki/Asian_financial_crisis#Indonesia
3 Asian Development Bank (ADB) - Key Indicators 2006 (www.adb.org/statistics) – Note: All macroeconomic data is from ADB, unless otherwise noted.
4 Economic Intelligence Unit: Country Profile Report 2006, Indonesia.
5 https://www.cia.gov/cia/publications/factbook/geos/id.html
6 Bloomberg
9 Economic Intelligence Unit: Country Profile Report 2006, Indonesia.
10 Economic Intelligence Unit: Country Profile Report 2006, Indonesia.