1. Introduction

Indonesia has had an open economy since the early 1970s when the government liberalized capital controls amid stable inflation and modest fiscal deficits (Hill 1996). Meanwhile, open domestic economies are susceptible to external shocks such as large short-term capital movements. As a result, we might expect that Indonesia’s liberal markets would make the economy more vulnerable to international shocks than its less-open neighbors such as the People’s Republic of China (PRC). Yet, we will show that during the most recent crisis emanating from the Eurozone, Indonesia’s domestic economy was not destabilized. This policy brief will explore the reasons behind this result.

2. The Global Economic Crisis

Fallout from the Eurozone financial crisis negatively impacted both developed and developing countries. The economies of the European Union (EU) comprised 17% of the world economy in 2012, generating around $12.2 trillion in gross domestic product (GDP). As a result of the EU’s position in the global economy and its trade and investment regimes, shocks in the Eurozone have both short- and long-term effects on its trading partners. This occurs both directly through lost trade and lower volumes of cross-border investment and capital outflows, and also indirectly through financial sector linkages. In general, the Eurozone crisis would be expected to affect the EU’s trading partners via their balance of payments.

1 This policy brief is part of a series that highlights the competitiveness challenges that Asian countries face in the current economic environment where volatility has increased and trade is increasingly organized into regional value chains. It comes out of issues raised during the Asian International Economists Network (AIEN) Call for Papers Workshop, Trade Competitiveness in a World of Rapid Changes: Challenges and Opportunities for Asia, held at the Asian Development Bank (ADB), Manila on 22 March 2013. We would like to thank Alisa DiCaprio (ADB), Tatsuji Hayakawa (ADB), Farrukh Irnazarov (Central Asian Development Institute, Uzbekistan), Marc C. Ayes (AIEN, ADB), and Brendan Coates (World Bank, Jakarta).
Within Europe, governments were unable to unilaterally respond to the currency crisis because of constraints on monetary policy resulting from the monetary union. This left only fiscal policies and the most that governments could do was to adopt austerity measures, a move unpopular with proponents of higher deficits to boost weak domestic economies. The European Central Bank lowered interest rates, provided cheap loans, and offered support to several Eurozone countries through sovereign bailouts. Yet, this has been insufficient in preventing default in several countries. While there has been great instability within the Eurozone, concerns of contagion affecting countries outside Europe have diminished as a result of Europe’s fiscal consolidation and structural reforms.

To understand the impact of the crisis on Indonesia, we look to balance of payments data, which capture the direct channels mentioned above.

3. The Indonesian Economy

Europe is not one of Indonesia’s main trading partners. Between 2008 and 2013, its four biggest trading partners were Japan, the PRC, Singapore, and the United States (US). These countries are also the four largest sources of foreign investment. Therefore, from a trade and investment point of view we might not expect large domestic swings to result from the Eurozone crisis.

However, there is a possible channel through which the Eurozone crisis would affect the Indonesian economy, that is through capital, or short-term portfolio, movements. As part of their response to the Eurozone crisis and the 2008–2009 global financial crisis, some developed countries pursued large-scale monetary expansion policies, known as quantitative easing (QE), with the aim of injecting additional money into the economy. Most of this money has flown into emerging countries, including Indonesia, as short-term portfolio investments.

Trade, foreign direct investment, and short-term portfolio investment are the main components of the balance of payments account. This section will trace whether the changes that occurred to these components affected the Indonesian economy, proxied by GDP.

Before the 1997–1998 Asian financial crisis, movements in Indonesia’s current account were mirrored by movements in the financial account (Figure 1), as the financing of the balance of payments deficit was dominated by the financial account. The relatively stable deficit in the current account was offset by a surplus in the financial account. Indonesia’s crawling peg exchange rate regime, which does not allow a depreciation of more than 5% per year against the US dollar, reduced incentives to export. Since 1997, in contrast, the balance of payments has typically been dominated by a surplus in the current account. A huge depreciation of the rupiah increased the incentive to export and reduce imports. There were some periods, however, where the current account and financial account deteriorated sharply—such as when there were massive redemptions in the local mutual fund market followed by capital outflows, and during the US subprime mortgage crisis in 2008—with both the current and capital accounts deteriorating sharply. This implies that the change of the exchange rate regime from fixed to flexible created

![Figure 1: Comparison between Current Account and Financial Account, 1980–1997 (rupiah million)](source: Ministry of Finance)
a shift in the financing of the deficit in the balance of payments from the financial account to the current account.

Empirical analysis using post-Asian financial crisis data from 1999 onward show that there is no long-run relationship between GDP at constant prices and the trade balance (Figure 2). A similar result was derived when we ran the Johansen Co-integration Test on GDP at constant prices and the current account using the same assumption. The movement of the trade balance was not correlated with the growth of GDP. In the long-run, despite its role in the balance of payments, the trade balance had no impact on economic growth.

A qualitative observation of GDP from an expenditure point of view shows that the biggest contribution to economic growth as represented by a percentage change in GDP comes not from the trade balance, but from domestic consumption, followed by investment. This implies that domestic consumption and investment have a greater impact on economic growth than the trade balance.

4. Global Crises and the Indonesian Economy

Because of these additional protections, the channel by which a global crisis would be most likely to impact the Indonesian economy would be via balance of payments, specifically through the trade balance and financial account. Since the financial account is mostly dominated by foreign direct investment and short-term portfolio investment, Figure 3 below shows the movement of the trade balance, foreign direct investment, and portfolio investment since 2008. From the graph, it can be seen that portfolio investment proved the most volatile during the 2008–2009 crisis and the more recent Eurozone debt crisis. Therefore, out of those three components of the balance of payments, portfolio investment is most affected by a global crisis and the most likely channel through which such a crisis would affect the Indonesian economy.

The source of fluctuation in portfolio investment can be traced back to the QE policies of developed countries during the 2008–2009 global financial crisis. The impact of this policy on developing country trading partners such as Indonesia was to appreciate the exchange rate, reduce exports, increase imports, and lead to a general deterioration in the balance of trade, thereby shrinking the economy (Lam 2011).

In the Eurozone debt crisis, QE was implemented to increase liquidity and boost economic growth. These policies were implemented both implicitly (through maturity extension programs or by swapping short-term securities for long-term ones) and explicitly (through asset purchases programmed to ease inflation pressures and boost economic growth) by the US Federal Reserve, Bank of Japan, and European Central Bank, among others. Researchers (Morgan 2011) have shown that the resulting funds did not directly flow to emerging economies (e.g., Indonesia) but first went to the world financial centers such as London.
Figure 3 above illustrates some examples of the impact of QE on the movement of portfolio investment:

- The US Federal Reserve’s QE I between 1Q09 and 4Q09 and QE II between 4Q10 and 2Q11 resulted in an increase in portfolio investment in Indonesia during these same periods.
- The Bank of Japan’s QE measures in 4Q09, 2Q10, 4Q10, 1Q11, and 3Q11 increased portfolio investment in Indonesia in each of these quarters.
- For the European Central Bank, QE was implemented in 4Q11 and had a similar impact on portfolio investment in Indonesia in this quarter.

Thus, Figure 3 suggests there is a correlation between global economic conditions that result from capital inflows from quantitative QE in developed countries and portfolio investment in Indonesia.

A formal analysis was conducted of the correlation between portfolio investment and economic growth using data from the post-Asian financial crisis period (1998 onward). Using a model similar to the one developed by Aizenman et al. (2011) and Rachdi et al. (2011), this analysis ran a regression between growth of GDP at constant prices and portfolio investment as a percentage of GDP. The results in both rupiah and US dollar terms (Tables 1, 2) show no statistical correlation between the Eurozone crisis and Indonesian economic growth. In other words, the Eurozone crisis has had no impact on the domestic economy of Indonesia. This finding is interesting because despite the theory that an open economy is vulnerable to international shocks, econometric results show that the Indonesian economy, as represented by economic growth, was not destabilized by an external crisis such as the Eurozone debt crisis.

5. Government Policies Related to Global Crises

The resilience of the Indonesian economy in the face of the Eurozone debt crisis is surprising and suggests that the reasons lie with government policies. A number of these policies that were implemented by the Indonesian government and central bank to maintain domestic economy stability are described below.

A. Fiscal Policies

The strong growth of real GDP in Indonesia over time has been supported by domestic investment and consumption. These factors explain more than 80% of Indonesia’s real GDP growth since 2001. They also helped limit the domestic impact of the slowdown in global demand in Indonesia relative to other Asian countries. Investment and consumption growth have benefited from Indonesia’s demographic dividend, as Indonesia’s relatively young labor force and rising per capita income generate strong demand for the consumption goods and services. The young population is one of the key factors supporting domestic consumption. People between the ages of 20 and 50 dominate the population and the labor market.

From a fiscal management standpoint, there are several crisis prevention and mitigation steps that the government has
taken. These include the creation of the Coordination Forum for Financial System Stability and the establishment of a Crisis Management Protocol in 2011. These two mechanisms were created to accelerate coordination and decision-making during a financial sector crisis. The crisis management protocol regulates who should do what and when in the event of a crisis. The Coordination Forum for Financial System Stability was established as a forum where all financial regulators, particularly fiscal and monetary authorities, meet and make decisions on what to do in a crisis. Even in periods of calm, the forum meets regularly to assess conditions in the financial system.

In 2009, the government adopted regulations to provide incentives related to customs. These were followed by the creation of tax holidays and tax allowances in 2011 to avoid liquidity squeezes in the economy.

B. Monetary Policies

To support the stability of the financial system, as mandated by law, the authorities implemented macroprudential policies in 2011 through which the central bank can play an active role in stabilizing the financial system.

Effective policy coordination between the central bank and the government has reduced volatility in the face of crises. Policies include the channeling of existing capital inflows into longer-term investments, particularly infrastructure and productive capacity.

6. Conclusion

This policy brief has sought to explain the reasons behind Indonesia’s resilience during the recent Eurozone debt crisis. Empirical analysis showed that fiscal and monetary policies dampened the potentially negative domestic impacts of this crisis. In addition, the composition of economic growth in Indonesia, where domestic investment and consumption predominate, helped reduce the negative impact of the Eurozone crisis. Finally, demographic conditions have helped boost domestic consumption. In summary, the combination of policies and positive domestic economic conditions reduced the negative impacts of the Eurozone debt crisis in Indonesia.

Table 1: Ordinary Least Squares Estimates between Growth of GDP and Portfolio Investment as a Percentage of GDP, 4Q98–3Q12

<table>
<thead>
<tr>
<th>Dependent Variable: Growth of GDP (IDR, constant prices)</th>
<th>Estimated Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.023342</td>
<td>0.325644</td>
</tr>
<tr>
<td>Growth of Portfolio Investment over GDP</td>
<td>0.000168</td>
<td>0.000207</td>
</tr>
<tr>
<td>Growth of GDP constant price (-1)</td>
<td>-0.529763</td>
<td>0.114806</td>
</tr>
<tr>
<td>R Squared</td>
<td>0.298001</td>
<td></td>
</tr>
<tr>
<td>Durbin Watson</td>
<td>2.133347</td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Ordinary Least Squares Estimates between Growth of GDP and Portfolio Investment as a Percentage of GDP, 4Q98–3Q12

<table>
<thead>
<tr>
<th>Dependent Variable: Growth of GDP ($, constant prices)</th>
<th>Estimated Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.886489</td>
<td>1.233385</td>
</tr>
<tr>
<td>Growth of Portfolio Investment over GDP</td>
<td>0.000554</td>
<td>0.000855</td>
</tr>
<tr>
<td>Growth of GDP constant price (-1)</td>
<td>-0.529763</td>
<td>0.114724</td>
</tr>
<tr>
<td>R Squared</td>
<td>0.007864</td>
<td></td>
</tr>
<tr>
<td>Durbin Watson</td>
<td>2.393087</td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>
References


The Economist. Various issues.


Asian Bonds Online
www.asianbondsonline.adb.org

ADB Working Paper Series on Regional Economic Integration

Asian Regional Integration Center
www.aric.adb.org

Asian International Economists Network
www.aienetwork.org

To receive a policy brief from the Office of Regional Economic Integration (OREI), please send an email to orei_info@adb.org

About Us
OREI traces its roots to the Regional Economic Monitoring Unit (REMU)—established in the aftermath of the 1997/98 Asian financial crisis. It was upgraded and renamed OREI in April 2005, as ADB expanded its role in promoting regional cooperation and integration (RCI) throughout Asia and the Pacific.

OREI assists its developing member countries in pursuing open regionalism that serves as a building block to global integration.

Asian Development Bank
ADB, based in Manila, is dedicated to reducing poverty in the Asia and Pacific region through inclusive economic growth, environmentally sustainable growth, and regional integration. Established in 1966, it is owned by 67 members—48 from the region.

ADB Briefs are based on papers or notes prepared by ADB staff and their resource persons. The series is designed to provide concise, nontechnical accounts of policy issues of topical interest, with a view to facilitating informed debate. The Department of External Relations administers the series.

The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of ADB or its Board of Governors or the governments they represent. ADB encourages printing or copying information exclusively for personal and noncommercial use with proper acknowledgment of ADB. Users are restricted from reselling, redistributing, or creating derivative works for commercial purposes without the express, written consent of ADB.

Asian Development Bank
6 ADB Avenue, Mandaluyong City
1550 Metro Manila, Philippines
Tel +63 2 632 4444
Fax +63 2 636 2444
information@adb.org
www.adb.org/documents/briefs

In this publication, “$” refers to US dollars.