Discuss the evidence suggesting that developing countries have become more resilient in recent decades. What factors could be responsible for the increase in resilience?

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1. Introduction

Many emerging markets and developing economies (EMDEs) performed well over the last two decades and even through the global financial crisis. Although they experienced a moderately negative growth in 2009 when the financial crisis hit the world economy, they recovered rather quickly to their pre-crisis rate, whereas advanced economies (AEs) struggled to for a few years after the crisis (Figure 1). The frequency of negative economic growth in EMDEs has also declined over the last few decades; approximately 30-40 percent of EMDEs experienced negative growth throughout 1980s and early 1990s, but this has gone down to around 20 percent in the past two decades (Figure 2).

This seemingly improved resilience of EMDEs in recent years has raised an important question concerning what caused the improvement. Policy implications of this question can be significant as understanding what works to improve the economy could help make this positive trend last longer and prepare for potential future shocks. The objective of this essay, therefore, is to investigate what factors are responsible for their greater resilience.

In short, my argument is that trends in some macroeconomic outcome variables suggest that resilience of EMDEs have indeed improved over the past few decades, and this could be associated with improvements in monetary, fiscal, and exchange rate policies in these countries. This essay develops this argument by examining changes in macroeconomic policies in EMDEs over the recent decades. Initially, Section two reviews the macroeconomic outcome variables in EMDEs, which is followed by Section three that examines different macroeconomic policies and explores possible connections between the policies and the improvement in resilience. Finally, Section four is the conclusion of the essay.

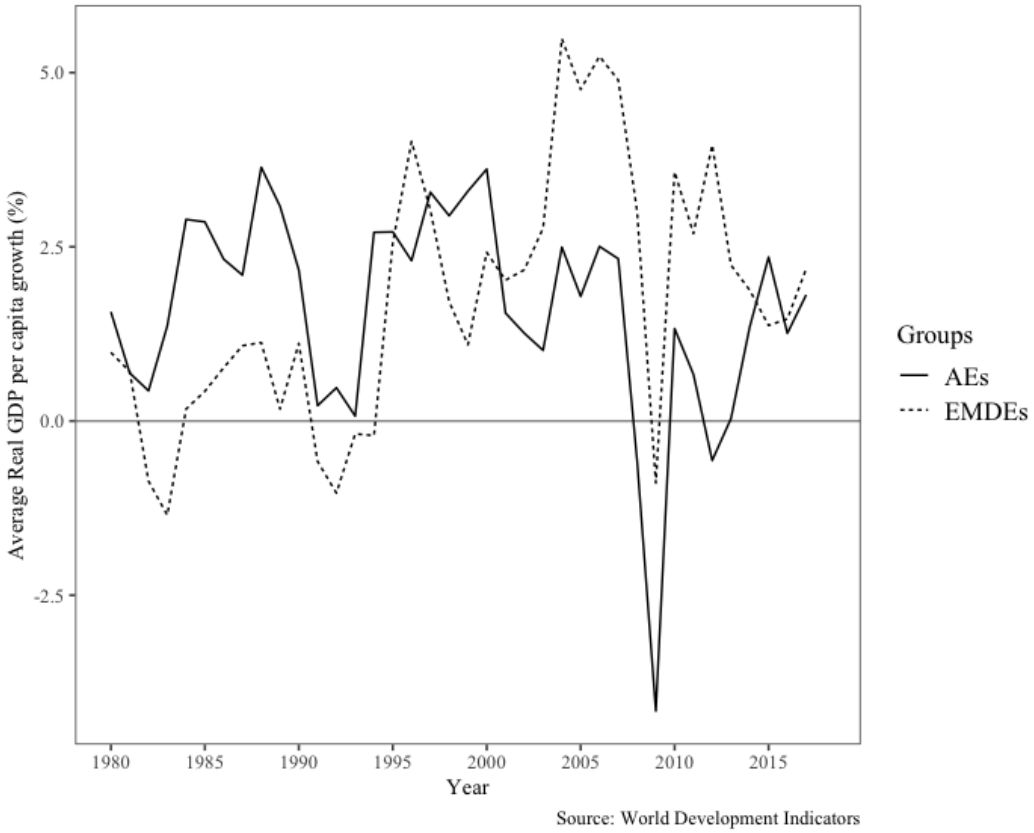

Figure 1: Real GDP per capita Growth

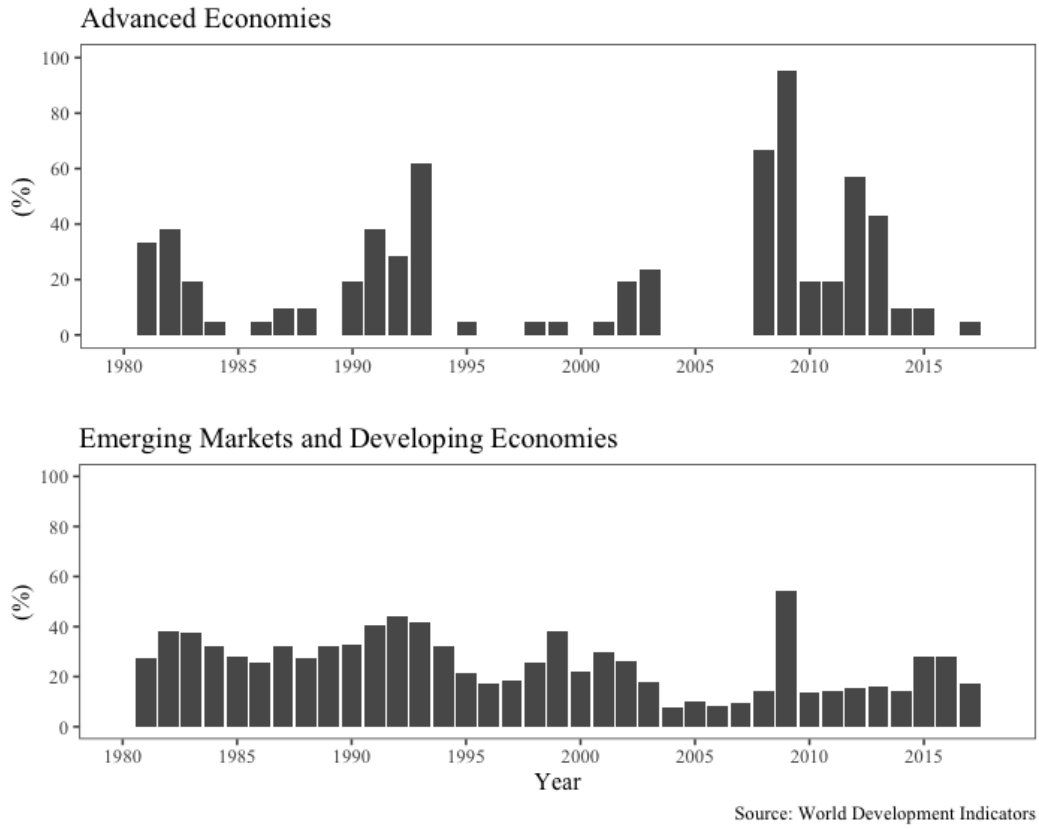

Figure 2: Share of Economies with Negative Growth

2. Stylised Facts about Resilience

The growth of developing countries is often described as complex, diverse, and less persistent compared to that of AEs. As Pritchett (2000) explains, their growth often consists of "mountains, plateaus, cliffs, and plains". While AEs tend to grow at steady rate for decades, many EMDEs, without any apparent change in fundamentals – such as education levels, investment rate, and trade – experience stagnation for years, or start growing rapidly (Figure 3). To further examine EMDEs' macroeconomic stability over the past few decades, this section will look at some of the key macroeconomic outcome variables, namely the volatility of the growth rate, the levels of inflation, and the current account balance.

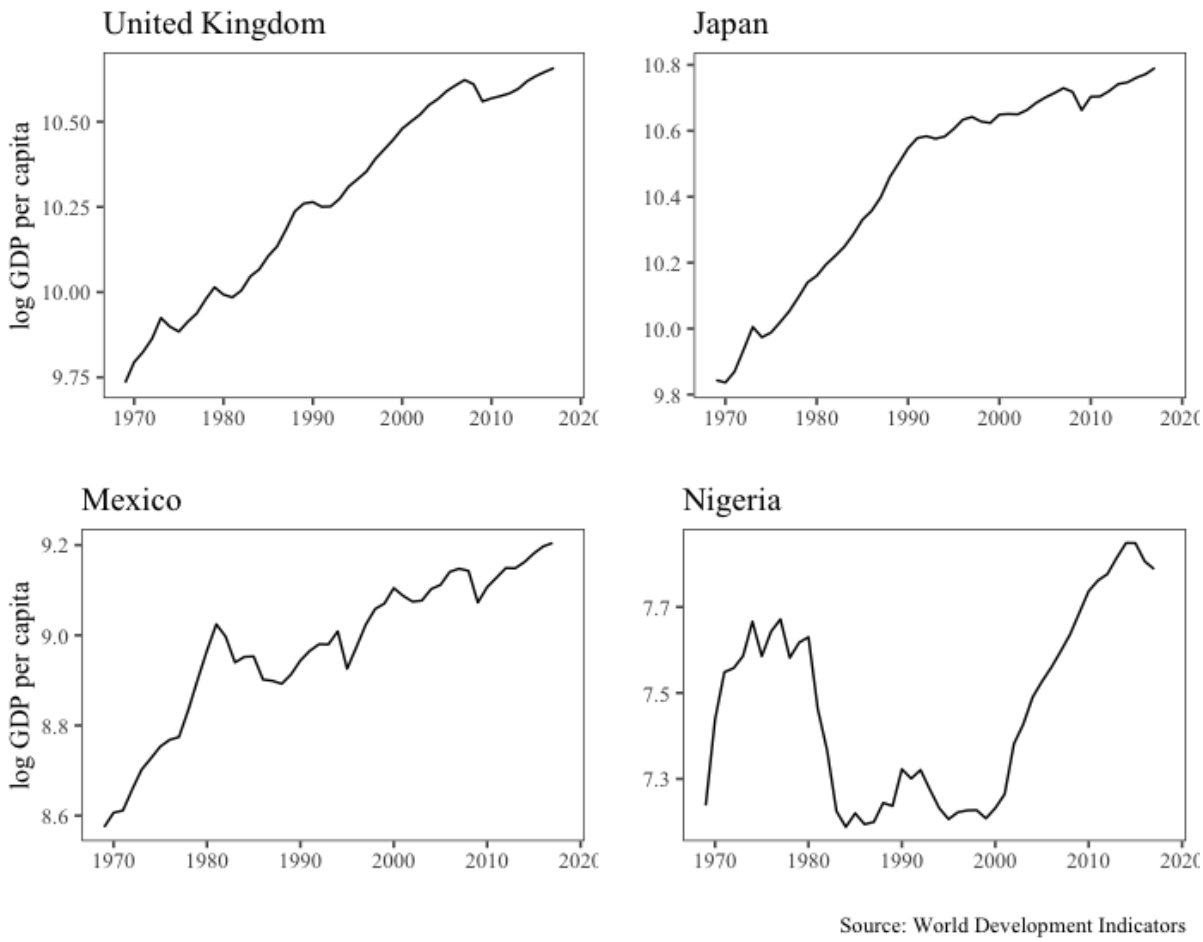

Figure 3: Different Characteristics of Growth in AEs and EMDEs

Figure 4 shows the volatility of GDP per capita growth in AEs, EMs and Low Income Countries (LICs). Both EMs and LICs experienced less volatile growth in 2000-09 compared to 1990-1999, but EMs' growth was more volatile during 2010-18 whereas the growth volatility of LICs continued to drop even further.[1]

[1] See Appendix A for lists of countries in AEs, EMs and LICs

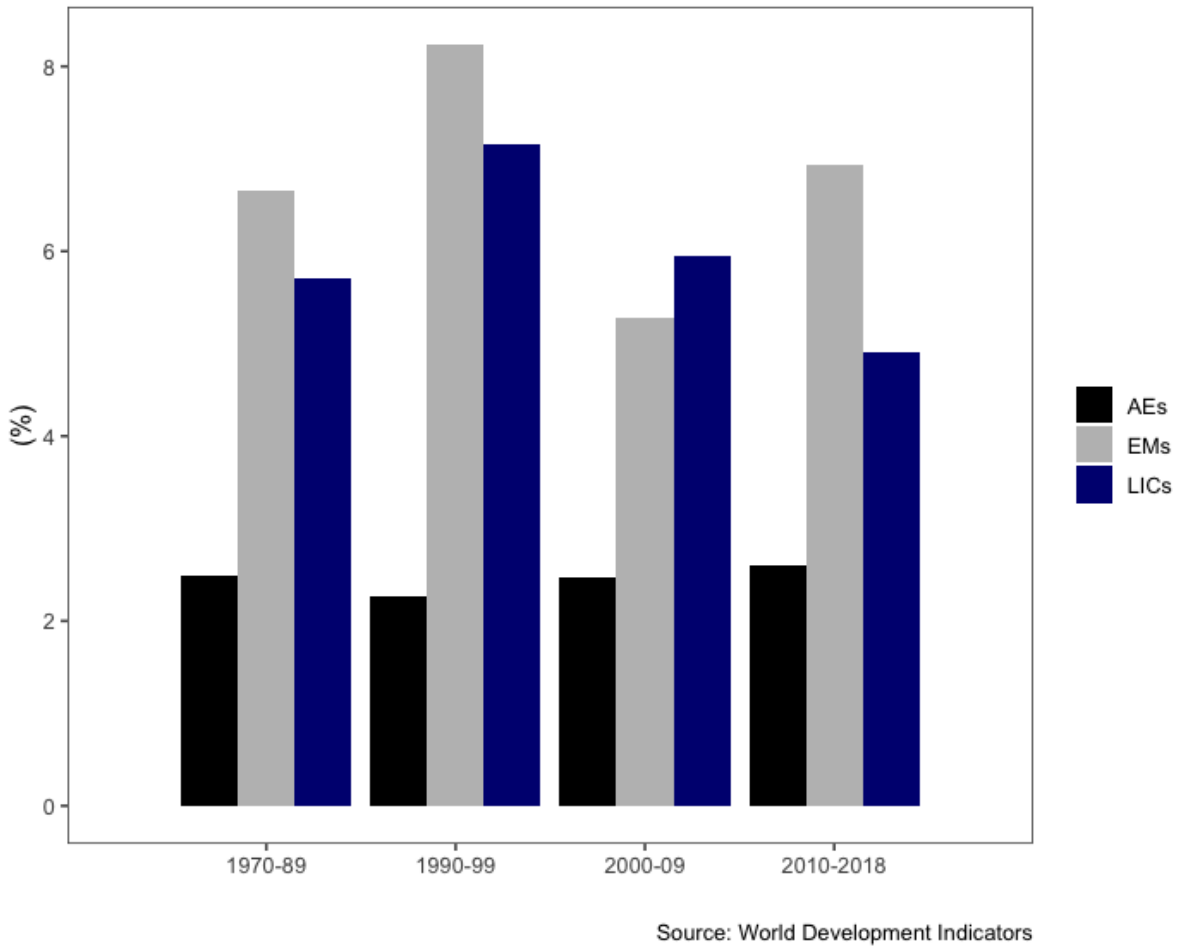

Figure 4: Standard Deviation of GDP per capita Growth

Another key variable for macroeconomic stability is the inflation rates. Figure 5 displays the median inflation rates in AEs and EMDEs over the period between 1969 and 2018. EMDEs experienced high inflation rate in the early 1990s, but it declined drastically afterwards except for the spike in 2009 when the financial crisis occurred. Similarly, the incidence of high inflation in developing countries peaked in the early 1990s, and then declined considerably down to nearly zero percent in recent years (Figure 6). Figure 7 shows the median current account balance in each income group of countries. While the current account deficits in both EMs and LICs declined in 2000-09, it increased during 2010-2018. The deficit still remains below 2% of GDP for EMs, but it has gone up to 6% for LICs.

Overall, while some of these macroeconomic outcome variables show a slight aggravation in 2010-18 in either EMs or LICs, there seems a general improvement in resilience in EMDEs compared to before the early 1990s. Especially, inflation rate and the incidence of high inflation in these countries improved significantly in the past few decades.

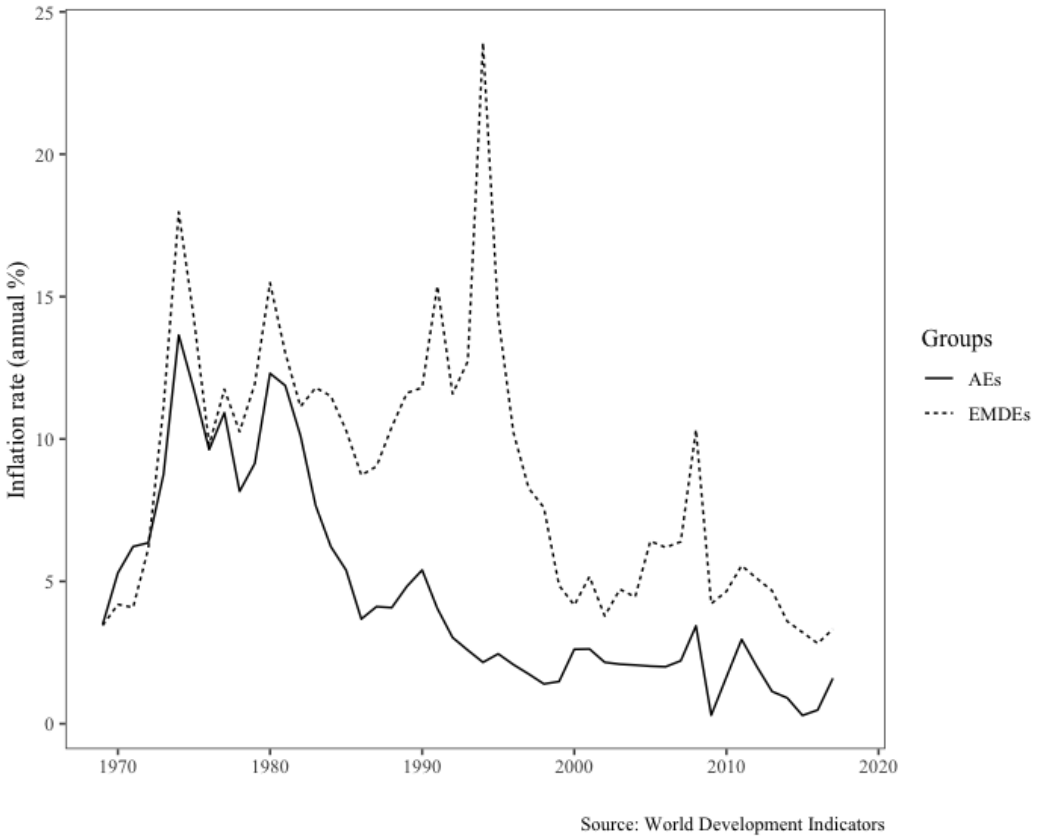

Figure 5: Inflation, Consumer Prices (annual %)

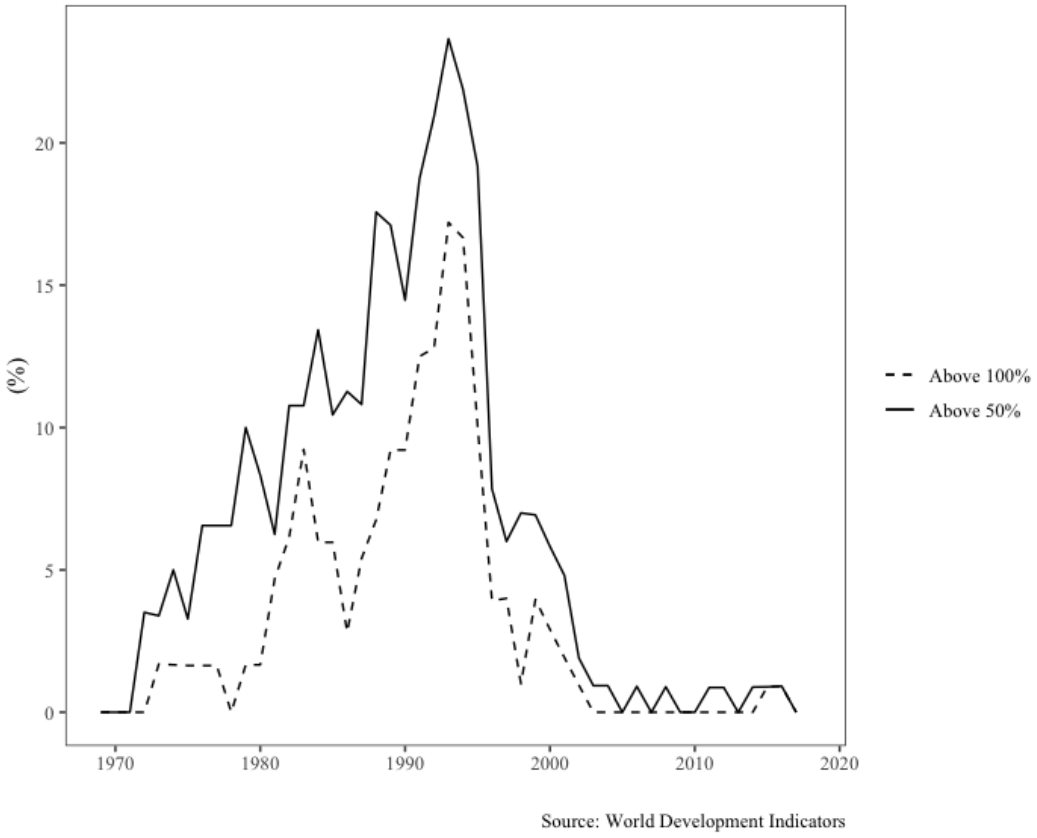

Figure 6: High Inflation in EMDEs (relative frequency, percent)

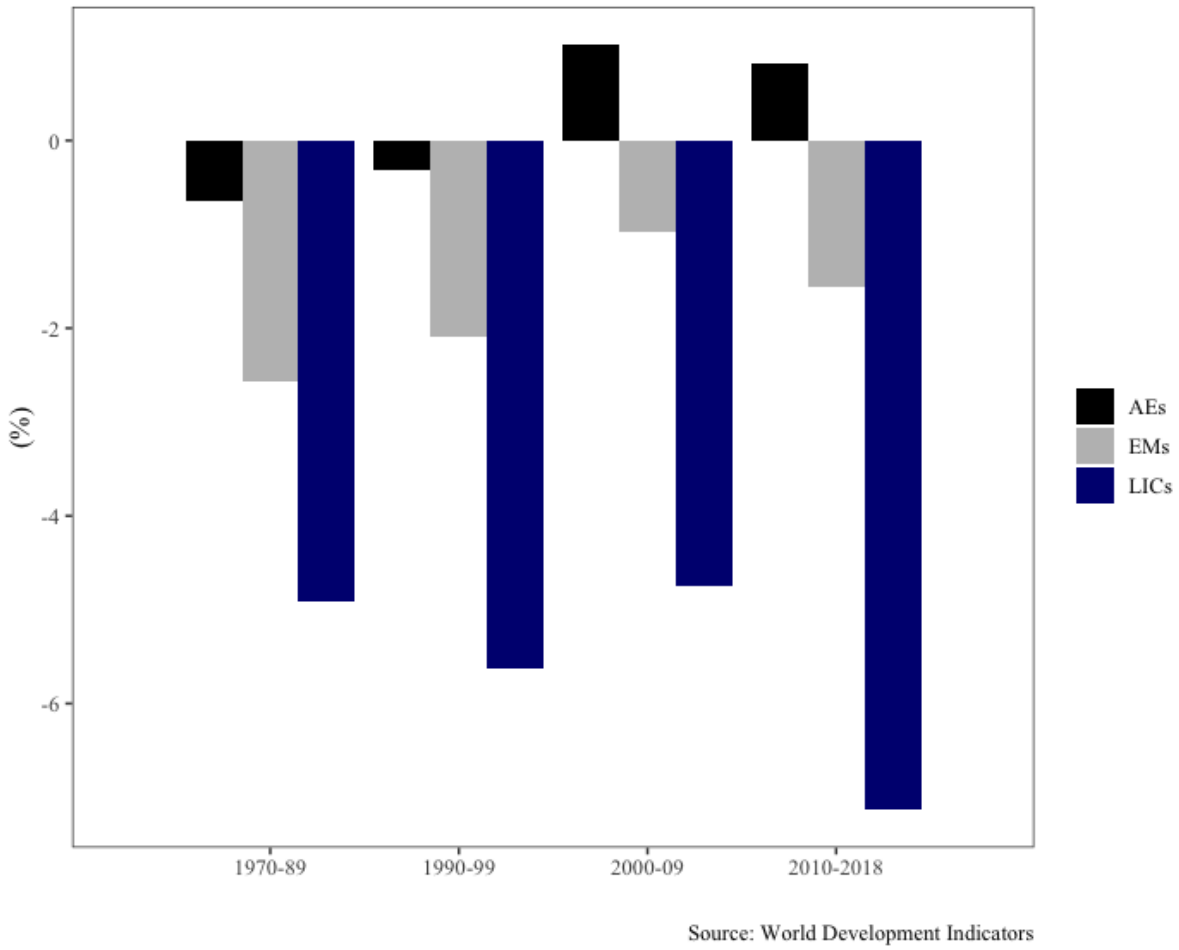

Figure 7: Current Account Balance (% of GDP)

3. What Factors are Responsible for the Improved Resilience?

While there are several arguments put forward to explain why resilience of EMDEs appears to have improved, it is commonly argued that greater resilience is a result of improvements in their macroeconomic policies, namely monetary, exchange rate, and fiscal policy (Abiad et al, 2012; Kose and Prasad, 2011; De Gregorio, 2013; Kenç et al, 2016).

3.1. Monetary Policy

The significant decline in inflation throughout the EMDEs can be ascribed to an increase in more credible monetary policies in these countries. For example, a large number of central banks have adopted a technique called inflation targeting (IT) in recent years to control the rise in the price level (Table 1). IT has become a common strategy for central banks throughout the world, and 36 countries have adopted IT as of 2015 (Schmidt-Hebbel and Carrasco, 2016). The general idea of IT is essentially straightforward; the central bank estimates the future path of inflation and compares it with the target inflation – the rate the government believes to be appropriate for the economy (Hammond, 2011; Roger, 2010). The difference between the estimate and the target determines how much

monetary policy has to be adjusted. De Carvalho Filho (2010) argues that IT allows EMs to deal with deflationary risks better and gives them more room for monetary easing, generating better monetary policy and macroeconomic outcomes.

The empirical literature on the impacts of IT on inflation and growth suggests that it has been effective in achieving price stability. For instance, Batini and Laxton (2007) investigate the effects of IT on several macroeconomic variables using a sample of 44 EMs. They find that IT is associated with 4.8% reduction in average inflation rate and 3.6% reduction in its volatility. Similarly, Mishkin and Schmidt-Hebbel (2001) assess the effects of IT on inflation in the industrial and emerging economies and found it has been successful in obtaining price stability and a lower response to oil shocks.

Table 1: Countries with Inflation Targeting

Country	IT adoption date	Country	IT adoption date
New Zealand	1990	Philippines	2002
Canada	1991	Guatemala	2005
United Kingdom	1992	Indonesia	2005
Australia	1993	Romania	2005
Sweden	1993	Serbia	2006
Czech Republic	1997	Turkey	2006
Israel	1997	Armenia	2006
Poland	1998	Ghana	2007
Brazil	1999	Uruguay	2007
Chile	1999	Albania	2009
Colombia	1999	Georgia	2009
South Africa	2000	Paraguay	2011
Thailand	2000	Uganda	2011
Hungary	2001	Dominican Republic	2012
Mexico	2001	Japan	2013
Iceland	2001	Moldova	2013
Korea	2001	India	2015
Norway	2001	Kazakhstan	2015
Peru	2002	Russia	2015

Source: IMF(2015)

3.2. Exchange Rate Policy

Some argue that the improvement in resilience is also associated with better exchange rate policy. Many EMDEs have switched from hard exchange rate pegs to more flexible exchange rates in the past few decades. While both fixed and flexible exchange rate regimes have their own advantages, Friedman (1953) and Mundell (1961) hypothesised that flexible exchange rates can act as a "shock absorber" when the economy is hit by foreign real shocks. In the case of an adverse foreign shock that requires a fall of the real exchange rate, it is easier for the economy to adjust the nominal exchange rate rather than to wait until the imbalances in the goods and labour markets push the nominal wages and goods' prices down, with the subsequent decline in output and employment (Céspedes et al, 2000). This was empirically confirmed by Hoffmann (2007) who examine the impacts of external shocks to 44 developing countries under fixed or flexible exchange rates regimes. The author found that external shocks are less contractionary under flexible than under pegged exchange rates.

Adoption of flexible exchange rates, in theory, means that there is less need to accumulate foreign exchange reserves as countries no longer have to keep the value of their currency at a fixed rate. In reality, however, many emerging markets around the world built up a large amount of reserves, partly as a result of their export-oriented growth strategies (Figure 8) (Kose and Prasad, 2011). It is often argued that the accumulation of foreign reserves might be one of the important factors behind the resilience. Aizenman and Lee (2007) explain that foreign reserves play a critical dual role. On the one hand, reserves work as a buffer against sudden stops of capital inflows, which causes a rapid depreciation of the currency, pushing the inflation higher and increasing the burden of foreign debts in real terms. This could also dampen investors' confidence, resulting in a decline in investments (Eichengreen and Gupta, 2016). The holding of large foreign reserves can be an effective macroeconomic strategy to reduce such risks of a balance of payment crisis. On the other hand, reserves can be used as an instrument of exchange rate policy. Even the countries with flexible exchange rates often use reserves to keep the value of their currency lower than the US dollar to keep their exports relatively cheaper, boosting trade and economic growth. Some empirical evidence suggests that the high level of foreign reserves is, in fact, significantly associated with less severe impacts of the global financial crisis (Frankel and Saravelos, 2012; Gourinchas and Obstfeld, 2012).

Figure 8: Reserves (Current US$)

3.3. Fiscal Policy

Fiscal policies in developing countries are frequently characterised as being procyclical, i.e. they increase spending or cut taxes during expansion periods and cut spending or raise taxes during recessions (Frankel et al, 2013). The previous literature on this topic identify two reasons why some developing countries pursue such fiscal policies that could exacerbate the underlying business cycle: i) imperfect access to international credit markets, and ii) political distortions. Having little access to credit markets during a recession will automatically leave the government with no choice but to reduce spending and raise taxes (Gavin et al, 1996; Gavin and Perotti, 1997; Riascos and Vegh, 2003). During periods of expansion, on the other hand, there tend to be political pressures for extra spending that are hard to resist, especially when there is a genuine need for additional government spending in vital social areas (Velasco, 1999; Talvi and Vegh, 2005).

Nevertheless, Frankel et al (2013) show that increasing numbers of developing countries successfully escaped the fiscal procyclicality trap and have become countercyclical over the last few decades. Of

73 developing countries in their sample, only 6 showed a countercyclical policy during the period 1960-1999, but the figure has gone up to 26 for the period 2000-2009.

One of the reasons why they have managed to "graduate" from procyclicality is due to the increase in foreign reserves and lower debt-GDP ratios (Figure 9). While the government debts in EMs and LICs were above 50% before 2000, it has gone down to around 40% for EMs and 30% for LICs in the last two decades. These two factors have contributed to a decrease in their default risk and created room to respond aggressively with countercyclical fiscal policies to offset the contractionary effects of crises (Ostray et al, 2010; Frankel et al, 2013).

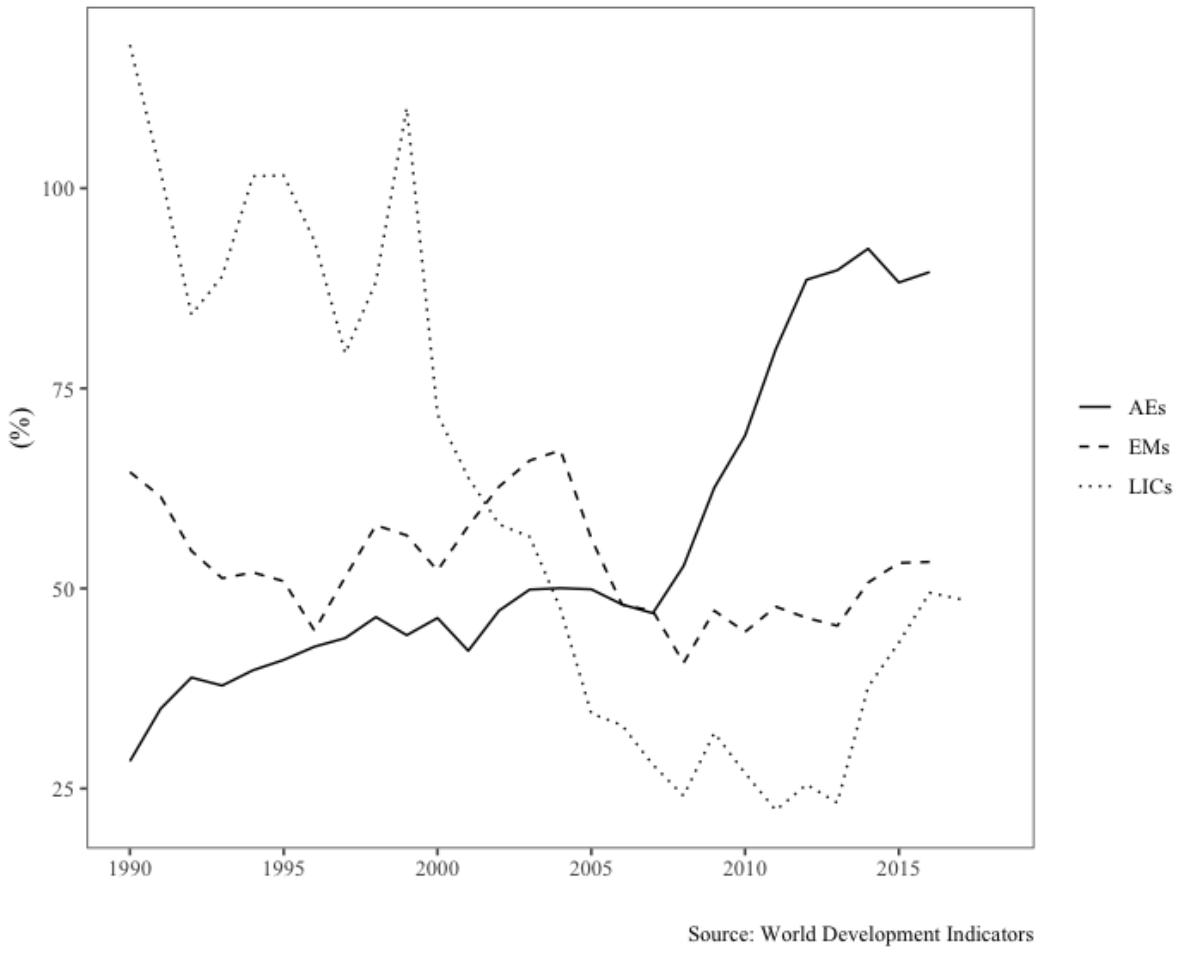

Figure 9: Central Government Debt (% of GDP)

4. Conclusion

This essay, thus far, examined factors associated with the apparent improvement in resilience of developing countries, with a focus on their macroeconomic policies. Initially, it looked at some macroeconomic outcome variables to see whether developing countries have, in fact, become more resilient over the past few decades. Although there is a moderate increase in volatility in the last few years, they showed a gradual improvement in these variables during the period 1990-2009. Especially the inflation rates show a significant decline to below 10% since mid-1990s. This essay, then, examined macroeconomic policies of developing countries to explain their improved resilience. It seems that more stable policymaking might be a part of the reason why they are now more resilient than in previous decades. Improvements in policies, such as adoption of inflation targeting and more flexible exchange rate systems, and accumulation of foreign exchange reserves, have played an important role in obtaining greater resilience.

Nevertheless, there are a few things this essay did not address. For example, there are other factors that possibly influenced the improvement in resilience. Frankel et al (2013) argue that the quality of institutions – that is, corruption, law and order, bureaucratic quality, and investment profile – are a critical determinant of whether a country conducts countercyclical policies, hence increasing resilience. Furthermore, Abiad et al (2012) argue that, aside from improved policies, a decline in frequency of various types of domestic and external shocks might have also contributed to the improvement in resilience. Kose and Prasad (2011) suggest that other factors such as greater trade linkages among developing countries and more diversification in their production and exports promoted resilience as well. For future research, it could be useful to include all of these factors and carry out econometric analysis to further investigate their effects on resilience and causal relationships.

Appendix A: Economy Groups

Advanced Economies (AEs)	Emerging Market Economies (EMs)	Low-Income Countries (LICs)
Australia	China	Afghanistan
Austria	Hong Kong SAR, China	Bangladesh
Belgium	India	Cambodia
Canada	Indonesia	Lao PDR
Denmark	Korea, Rep.	Myanmar
Finland	Malaysia	Nepal
France	Pakistan	Papua New Guinea
Germany	Philippines	Timor-Leste
Greece	Singapore	Vietnam
Ireland	Sri Lanka	Armenia
Italy	Thailand	Georgia
Japan	Azerbaijan	Kyrgyz Republic
Netherlands	Belarus	Moldova
New Zealand	Kazakhstan	Mongolia
Norway	Russian Federation	Bolivia
Portugal	Ukraine	Haiti
Spain	Albania	Honduras
Sweden	Bosnia and Herzegovina	Nicaragua
Switzerland	Bulgaria	Mauritania
United Kingdom	Croatia	Sudan
United States	Czech Republic	Yemen, Rep.
	Estonia	Benin
	Hungary	Burkina Faso
	Latvia	Burundi
	Lithuania	Cameroon
	Macedonia, FYR	Central African Republic
	Poland	Chad
	Romania	Congo, Dem. Rep.
	Serbia	Congo, Rep.
	Slovak Republic	Cote d'Ivoire
	Slovenia	Eritrea
	Turkey	Ethiopia
	Argentina	Ghana
	Brazil	Guinea
	Chile	Kenya
	Colombia	Lesotho
	Costa Rica	Liberia
	Dominican Republic	Madagascar
	Ecuador	Malawi
	El Salvador	Mali
	Guatemala	Mozambique

	Jamaica	Niger
	Mexico	Nigeria
	Panama	Rwanda
	Paraguay	Senegal
	Peru	Sierra Leone
	Trinidad and Tobago	Tanzania
	Uruguay	Togo
	Venezuela, RB	Uganda
	Algeria	Zambia
	Egypt, Arab Rep.	Zimbabwe
	Iran, Islamic Rep.	
	Iraq	
	Israel	
	Jordan	
	Kuwait	
	Lebanon	
	Libya	
	Morocco	
	Oman	
	Saudi Arabia	
	Syrian Arab Republic	
	Tunisia	
	United Arab Emirates	
	Angola	
	Botswana	
	Namibia	
	South Africa	

Note: Countries were split into three groups according to the classification made by Pritchett (2000) and Abiad et al (2012). AEs are defined by membership in the Organisation for Economic Cooperation and Development before 1990, with the exception of Turkey. All other countries are classified as EMDEs, which was further divided into two groups: Emerging market economies (EMs) and Low-income countries (LICs). LICs are defined as the economies that were eligible for concessional IMF loans as of 2012, and the remaining countries were classified as EMs.

Data Source

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