

IMF Working Paper

The Economics of Political Transitions: Implications for the Arab Spring

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Middle East and Central Asia Department

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Abstract

Over the past two years, ongoing political transitions in many Arab countries have led to social unrest and an economic downturn. This paper examines comparable historical episodes of political instability to derive implications for the near- and medium-term economic outlook in the Arab countries in transition. In general, past episodes of political instability were characterized by a sharp deterioration in macroeconomic outcomes and a sluggish recovery over the medium term. Recent economic developments in the Arab countries in transition seem to be unfolding along similar lines, although the weak external environment and large fiscal vulnerabilities could result in a prolonged slump.

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Keywords: Economic growth; political instability; Arab Countries in Transition; Arab Spring

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I. INTRODUCTION

Two years after the beginning of the Arab Spring, social unrest has continued while the Arab Countries in Transition (including Egypt, Jordan, Libya, Morocco, Tunisia, and Yemen) are in the midst of an economic downturn. Egypt is facing serious economic challenges and erosion in investor confidence as social and political tensions remain high despite the democratic election of a president and ratification of a new constitution; Tunisia, where the democratic transition is relatively advanced, continues experiencing social disruptions which in turn affect economic activity; similarly, political transitions have advanced and economic activity has slowed in Jordan, Morocco, and Yemen to varying degrees.

At this juncture, it is useful to analyze trends in key macroeconomic variables from similar instances of past political transitions, to draw inferences for the near-term outlook in Arab Countries in Transition (ACTs). As there is heterogeneity in political transitions experienced by various countries, it is worthwhile to clarify what is meant by a political transition in the ACT context. For instance, the phrase “transition economies” has typically been associated with Eastern European economies, which underwent large economic and political transitions in the early 1990s, from centrally-planned communist regimes to democratic market economies. However, these are not the relevant historical episodes to draw comparisons as the ACTs are already market economies, with functioning private sectors that rely on price signals to drive resource allocation. Similarly, comparisons with countries that have seen regime change without social unrest are not appropriate, as most ACTs have seen social disruptions on a very large scale.

Therefore, we suggest that political transitions among the ACTs are characterized by intense political instability, which is manifest through changes in government and large scale social unrest. Our approach contrasts to studies that have examined transitions towards democracy, including European transition economies and countries that have experienced little social unrest (Freund and Jaud, 2013; Credit Suisse, 2011). While these studies are informative about the likelihood of success of democratization efforts in the ACTs, they offer limited information about the near-term outlook. Of course, not all ACTs have undergone political instability (PI) to the same degree. Thus, PI and the associated economic impact have been limited in Jordan and Morocco, but are much more extensive in Egypt, Libya, Tunisia, and Yemen.

There is a considerable literature examining the impact of PI on selected macroeconomic variables. Using panel data on a large number of countries and various measures of PI, a number of studies document a bi-directional relationship between economic growth and PI, so that poor growth outcomes cause PI and vice versa. In one study, Burke and Leigh (2010) find that output contractions increase the short-run likelihood of democratic change. Alesina et al (1996) find that countries and time periods with a high propensity of government collapse are associated with significantly lower growth than otherwise. A few studies also examine the channels through which PI impacts growth. Alesina and Perotti (1993) find that socio-political instability has an adverse impact on investment. Aisen and Veiga (2006) find that a higher degree of PI leads to higher inflation in developing countries. Aisen and Veiga (2010) find that PI lowers productivity growth and the rate of physical and human capital accumulation. A study by Credit Suisse (2011) finds that regime change can often be derailed, and countries

often face multiple waves of unrest. In addition, countries face 2–3 years of below-par growth initially, albeit long-term growth prospects generally improve. In general, these studies cover a large and heterogeneous set of PI episodes, while examining a relatively small set of macroeconomic variables. As a result, they do not provide a complete view of the near-term outlook following an episode of PI similar to that in the ACTs. This paper attempts to fill this gap.²

The paper is structured as follows. Section II provides details of the sample selection and methodology, while Section III explains the results for macroeconomic outcomes during periods of intense PI. Section IV summarizes and concludes.

II. SAMPLE SELECTION AND METHODOLOGY

To match the severity of political, social, and economic disruptions in the ACT, the Cross-National Time-Series (CNTS) Data Archive is used to identify all events in low- and middle-income countries that involved general strikes and anti-government demonstrations, together with a major government crisis or attempted revolution or coup since 1980. To ensure that social unrest occurred on a large scale, the events identified by the CNTS database are then cross-checked using information from news sources. Episodes of conflict (e.g., D.R.C., Nepal, Nicaragua, Nigeria, and Sudan) are excluded from the sample; European transition economies are excluded for reasons explained above; oil exporting economies are also excluded as economic fundamentals for these countries are mainly driven by oil prices.³ The resulting sample of 11 PI episodes is listed in Table 1.

Table 1. Political Instability Events Since 1980

	Political Crisis 1/	Government Change
Albania	1997-98	Yes
Argentina	2001-03	Yes
Cote D'Ivoire	2000-01	No
Honduras	2009-10	Yes
Korea	1980-81	Yes
Madagascar	2002	Yes
Myanmar	1988-90	No
Paraguay	1999-03	Yes
Philippines	1983-87	Yes
South Africa	1990-94	Yes
Togo	1991-93	No

1/ Dates from CNTS data and online news sources.

The small sample of PI episodes calls for a relatively simple empirical methodology. Trends in growth, consumption, investment, inflation, external and fiscal balances before, during, and after these events are investigated using an event study methodology similar to Fischer, Sahay, and Végh (1998), Freund and Jaud (2013), and Rasmussen (2004). The event date is considered to be the first year when there was significant political and social unrest which subsequently culminated in either a regime change or a consolidation of power, including through political repression. We then compare the trends for our sample with trends and projections in the PPP-GDP weighted average for the ACTs, using 2011 as the event year. In the analysis, we exclude Libya as it is an outlier and distorts the overall picture.⁴ Of course, while the small sample size

² See Box 2.2, IMF (2012).

limits the econometrics, the simple event study methodology is relatively robust. An important caveat to our results is that we do not control for the impact of the external economic environment in past episodes of PI.

III. MAIN FINDINGS

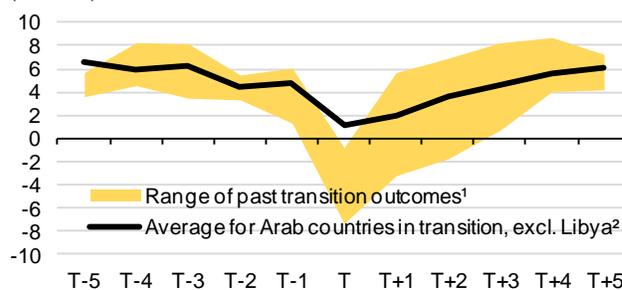
A. Output

In past episodes, PI coincided with a large decline in output and real GDP growth rates. Countries that experienced PI underwent a statistically significant fall in real GDP in the year of the event, with output declines ranging mostly between 1 and 7 percent (Figure 1, shaded portion reflects range between 1st and 3rd quartile). Actual growth rates dipped below trend during the year of the event and in subsequent years. As a result, output gaps turned negative the year of the event, and continued to widen for some time (Figure 2).⁵ On average, output remained below potential for 4 years after the initial drop, taking around 5 years for the recovery.

Unemployment rates rose during the PI episode in all countries in our sample, by about 1–1½ percentage points on average, during the first two years after the start of political unrest episodes and took between 4 to 5 years to return to pre-crisis levels (Figure 3).⁶

Figure 1

Real GDP Growth
(Percent)



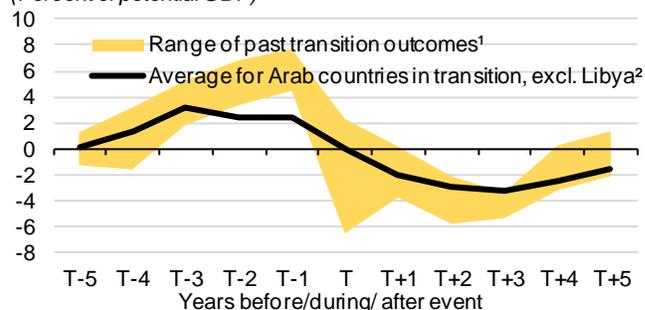
Sources: National authorities; and IMF staff estimates

¹Spread between 1st and 3rd quartile.

²For the ACTs, year T is 2011. Data beyond 2012 are IMF staff projections.

Figure 2

Output Gap
(Percent of potential GDP)



Sources: National authorities; and IMF staff estimates

¹Spread between 1st and 3rd quartile.

²For the ACTs, year T is 2011. Data beyond 2012 are IMF staff projections.

³ In our sample, we have included PI episodes after 1980 that subsequently evolved into conflict (Côte d'Ivoire) as that scenario remains a possibility for the ACT.

⁴ Libya experienced an output decline of 57 percent in 2011 due to severe disruptions in oil production. Subsequently, as oil production was restored in 2012, growth rates are estimated to have reached 117 percent, even though output remained below 2010 levels. The large swings have served to distort trends in several macroeconomic variables, when expressed in percent of GDP (see also IMF 2012).

⁵ Potential output for all countries is computed using an HP filter with the smoothing parameter equal to 100.

⁶ Unemployment data were available for only six countries in our sample.

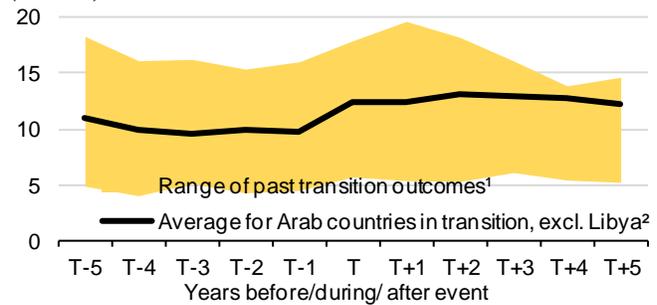
Similar to previous political transitions, ACT countries with greater PI (Egypt, Tunisia, and Yemen) experienced significant declines in real GDP in 2011, while Jordan and Morocco only saw growth rates dip below long-term trend (averages for ACT are represented by dark lines in Figures 1 and 2). For all ACTs, actual output is now below potential, and unemployment rates have increased from already high levels. Although we do not control for the state of the global economic environment in past episodes of PI, the current degree of weakness in the global economy, fiscal vulnerabilities in the ACTs (see below), and regional spillovers from Syria are likely to exert a further drag on the ACTs economic recovery and weigh on the outlook.

B. Consumption and Investment

Similar to typical cyclical downturns, past episodes of PI saw consumption remaining broadly resilient while investment suffered a large decline. On average, private consumption declined slightly while public consumption remained steady during the event year (measured in constant prices). On the other hand, declines in public and private investment were large, ranging approximately between 10 and 40 percent during the event year (Figures 4 and 5). Moreover, average growth rates of investment remained modest in subsequent years: public investment did not recover to pre-crisis levels (in percent of GDP) for at least 5 years after the event, while private investment also took 5 years to return to pre-crisis levels.

Among the ACTs, private and public consumption have remained relatively resilient, especially in Jordan and Morocco where the downturn was relatively mild. Public investment has declined by over 10 percent on average, with large declines in Egypt and Yemen

Figure 3
Unemployment Rate
(Percent)

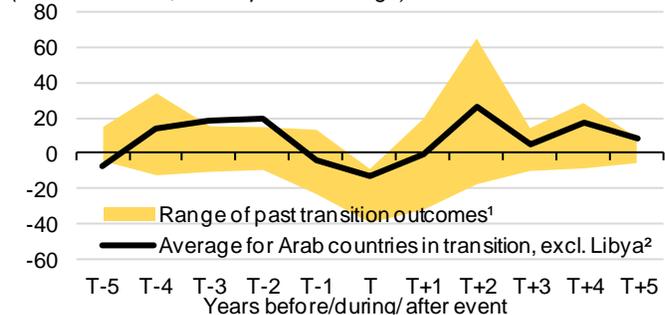


Sources: National authorities; and IMF staff estimates

¹Spread between 1st and 3rd quartile.

²For the ACTs, year T is 2011. Data beyond 2012 are IMF staff projections.

Figure 4
Gross Fixed Public Capital Formation
(Constant Prices; Annual percent change)

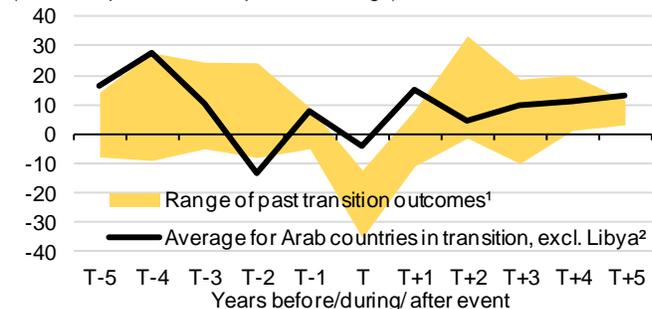


Sources: National authorities; and IMF staff estimates

¹Spread between 1st and 3rd quartile.

²For the ACTs, year T is 2011. Data beyond 2012 are IMF staff projections.

Figure 5
Gross Fixed Private Capital Formation
(Constant prices; Annual percent change)



Sources: National authorities; and IMF staff estimates

¹Spread between 1st and 3rd quartile.

²For the ACTs, year T is 2011. Data beyond 2012 are IMF staff projections.

outweighing small increases in Jordan and Morocco.⁷ A similar pattern is obtained for private investment, although the decline is somewhat subdued following the already large decline in private investment in 2009, following the global financial crisis.

C. Fiscal Positions

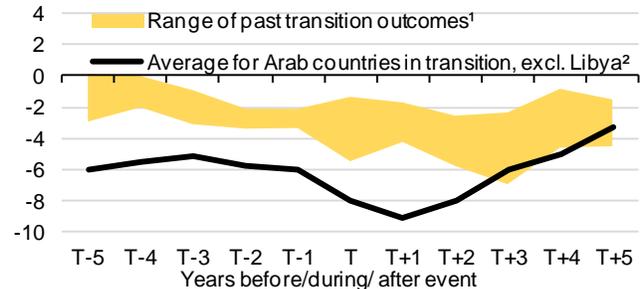
In previous political transitions, overall fiscal balances deteriorated by about 1 percent of GDP on average during the event year, and continued to deteriorate in the subsequent two years by a cumulative 1¾ percent of GDP.⁸ The increase in fiscal deficits was driven by weaker revenues and higher spending. Revenues recovered slowly after the event year, reaching pre-crisis levels (in percent of GDP) four years after the event, in line with the recovery in output. Government expenditures remained high for two years after the event. As a result, fiscal deficits returned to pre-crisis levels only in year T+4 (Figure 6). The deterioration in fiscal balances and the decline in GDP had an adverse impact on government debt (in percent of GDP).

It is clear from Figure 6 that the ACTs entered PI with higher overall fiscal deficits than previous political transitions. This was a result of appreciably higher government expenditures among the ACTs (in percent of GDP) than past PI episodes, despite revenues that were also somewhat higher.

Further, the deterioration in ACT fiscal positions was also significantly larger during 2011-12. The overall fiscal deficit is expected to have increased (relative to 2010) by about 2½ percent of GDP in 2011-12 owing to a decline in revenues as well as an increase in public expenditures, especially on untargeted food and energy subsidies. Government debt has also risen. The countercyclical fiscal stance in 2011-12 has helped mitigate the economic downturn. Going forward, the lack of fiscal space

Figure 6

Overall Fiscal Balance
(Percent of GDP)



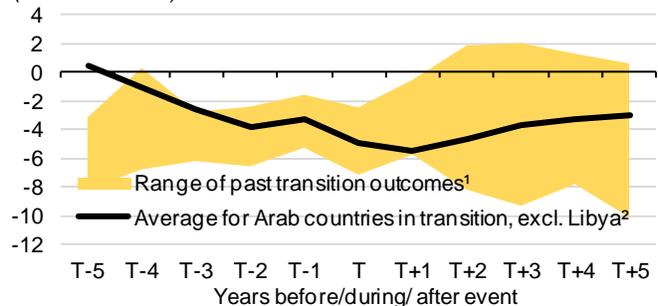
Sources: National authorities; and IMF staff estimates

¹Spread between 1st and 3rd quartile.

²For the ACTs, year T is 2011. Data beyond 2012 are IMF staff projections.

Figure 7

Current Account Balance
(Percent of GDP)



Sources: National authorities; and IMF staff estimates

¹Spread between 1st and 3rd quartile.

²For the ACTs, year T is 2011. Data beyond 2012 are IMF staff projections.

⁷ Due to a lack of data for Tunisia, this aggregate refers to Egypt, Jordan, Morocco, and Yemen.

⁸ Relevant fiscal data were available for 8 of the 11 countries in our sample.

will require a large fiscal consolidation to restore debt sustainability but will weigh on the recovery. Mobilization of external financing can also help smooth the adjustment.

D. External Balances and International Reserves

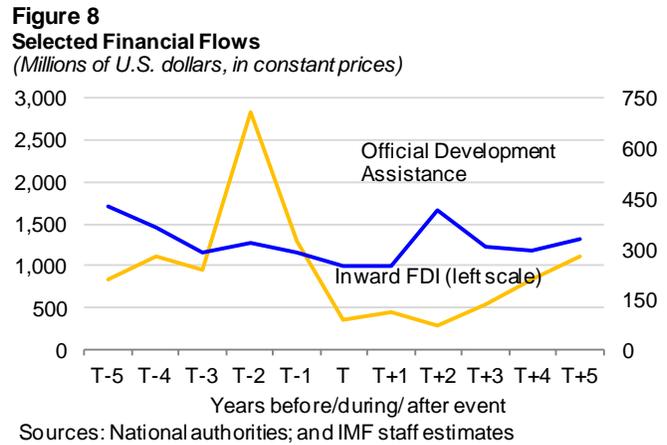
Ten of the 11 countries in our sample entered the PI episode with large current account deficits, which deteriorated further in the event year (Figure 7). However, the subsequent experience then varied: five years after the event, external current account balances had improved considerably in seven countries, whereas they had worsened in 4 of the 11 countries.⁹

During past cases of PI, investor confidence suffered, resulting in a sharp fall in inward foreign direct investment (Figure 8). At the same time, there appeared to be some delay in the pickup of official external assistance. The already large current account deficits and lower capital inflows led to a decline in international reserves in many countries. Capital outflows may also have played a role in some countries. Reserves recovered slowly, returning to pre-crisis levels about four years after the crisis.

Among the ACTs, external current account deficits widened in the five years prior to 2011. In 2011-12, they increased further, by around 2 percent of GDP. FDI and other financial inflows have fallen, and gross official reserves have declined sharply. In aggregate, the decline in gross official international reserves by end-2012 is projected to reach nearly 40 percent of the end-2010 level of reserves.

E. Exchange Rates and Inflation

Many, but not all of the countries in past episodes of PI succeeded in maintaining stable exchange rates and prices. Past cases with manageable external vulnerabilities (Côte d'Ivoire, Honduras, Madagascar, Paraguay, South Africa, and Togo), comprising both fixed and flexible exchange rate regimes, experienced little or no increase in exchange rate depreciation in years T and T+1 (Figure 9).^{10, 11} In this group of countries, inflation in years T and T+1 was also



⁹ Pair-wise correlations (not reported here) indicate that improvements in the current account balances were accompanied by a depreciation of the real exchange rate and gains in the terms of trade.

¹⁰ The classification of the exchange rate regime as fixed or flexible is based on the IMF's *Annual Report on Exchange Arrangements and Exchange Restrictions*.

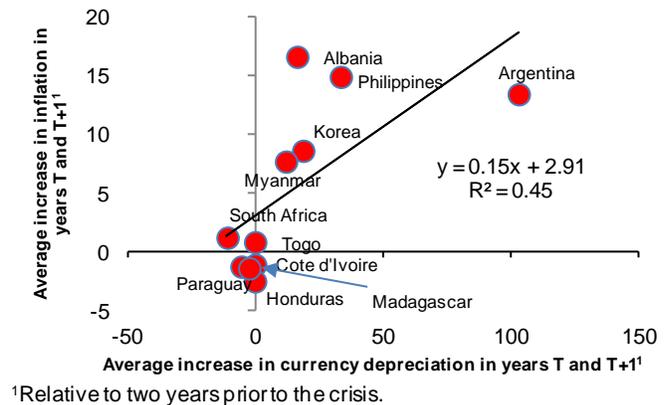
¹¹ The discussions in past IMF staff reports were examined to identify countries where external vulnerabilities were considered manageable (or not). These discussions often reflected a number of factors, including current

(continued...)

lower or in line with the two prior years (T-1 and T-2). By contrast, countries with high external vulnerabilities (Albania, Argentina, Korea, Myanmar, Philippines) experienced significant pressures on reserves and policy makers allowed for large currency depreciations.¹²

In three countries (Albania, Korea, and Myanmar) the increase in their average annual nominal currency depreciation ranged between 12 and 18 percent in years T and T+1; the passthrough of higher import prices contributed to higher average inflation between 7 and 17 percent. As a result, the real effective exchange rate remained broadly stable or appreciated in these countries. In Argentina and the Philippines, inflation increased by less than nominal currency depreciation, and the real effective exchange rate depreciated—by about 50 percent in Argentina and 15 percent in the Philippines.

Figure 9
Nominal Currency Depreciation and Inflation During the Crisis

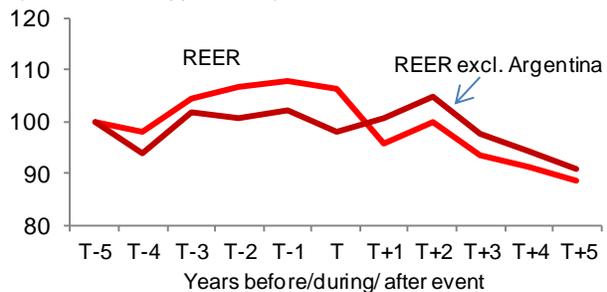


¹Relative to two years prior to the crisis.

For the entire set of countries, efforts to improve the competitiveness of the real exchange rate proved more successful in subsequent years, i.e. after year T+2 (Figure 10), perhaps as progress on the political front helped anchor expectations and reduce uncertainty.

In this regard, policymakers in the ACT limited exchange rate movements in 2011–12, and inflation developments remained generally benign. In early 2013, as international reserves continued to fall in Egypt, policy makers allowed greater exchange rate flexibility with the potential for inflation to increase. Going forward, as political reforms progress, policymakers in many countries in the region are looking to develop a richer monetary policy tool kit (including greater exchange rate flexibility) to help address rising external vulnerabilities and strengthen external competitiveness.

Figure 10
Aggregate Real Effective Exchange Rate Index¹
(An increase = appreciation)



¹For past transition outcomes. The index is constructed by applying country weights to annual percent changes in country indices, and is normalized by setting T-5 to 100.

account deficits, underlying trends in real exchange rates and competitiveness, external debt service burdens, reserves coverage, and ability to mobilize external financing.

¹² Of these five countries, two countries (Albania and Philippines) had flexible exchange rate regimes prior to the crisis; two countries (Argentina and Korea) had fixed exchange rate regimes prior to the crisis, but allowed greater flexibility post-crisis; one country (Myanmar) maintained a pegged exchange rate while a large parallel market also operated (at a significant discount).

IV. CONCLUSION

Our empirical work indicates that episodes of severe social unrest similar to those experienced in the ACTs are accompanied by a sharp deterioration in macroeconomic outcomes. Countries experiencing political instability (PI) undergo sizeable output losses. The recovery is often sluggish, and output gaps persist for about 5 years, leading to an increase in unemployment. The deterioration in fundamentals and heightened macroeconomic uncertainty lead to lower investment. Fiscal positions deteriorate and debt levels rise. Reserves decline during PI, and thereafter improve slowly. External current account balances improve over the medium-term in many cases, but not all. High external vulnerabilities can lead to added pressures and large currency depreciation, which in turn, can lead to higher inflation.

Many of the economic trends that have characterized other episodes of political instability are becoming evident in the ACT. Output declined in 2011 in Egypt, Tunisia, and Yemen, but remained more stable in Jordan and Morocco. Economic activity has remained at low levels in 2012, and similar to past episodes of PI, unemployment has increased. Macroeconomic stability has come under pressure as fiscal deficits have widened from already high levels, and external current account deficits have deteriorated. International reserves have declined. Inflation has remained muted in most countries due to weak aggregate demand.

In terms of prospects over the medium-term, the recovery in the ACT is complicated by weak external demand (especially from European trading partners), high food and fuel prices, and the need for sizable fiscal consolidation due to weak initial fiscal positions in the ACTs. Thus, economic recovery in the ACTs could be delayed even more than in past episodes of PI. Pressures on fiscal and external stability are also likely to be more intense. Although policy actions can help mitigate some of these adverse factors, weak transitional governments may find it politically difficult to implement measures to maintain macroeconomic stability and avoid a prolonged growth slump.

Measures that need to be implemented include a growth-friendly fiscal adjustment to reduce generalized subsidies, bolster investment, and strengthen targeted social safety nets. International financing could facilitate a gradual fiscal adjustment. Greater exchange rate flexibility could improve the ability of the economy to withstand and cope with external shocks, while implementation of institutional and regulatory reforms could raise potential growth and create greater and more equal access to economic and employment opportunities. As populations see new governments deliver higher standards of living, this will also reduce the likelihood of a recurrence of political instability.

REFERENCES

- Alesina, A., Ozler, S., Roubini, N. and Swagel, P. (1996). “Political Instability and Economic Growth”, *Journal of Economic Growth*, Vol. 1 (2), pp. 189–211.
- Alesina, A., and Perotti, R. (1996). “Income Distribution, Political Instability and Investment”, *European Economic Review*, Vol. 40 (6), pp. 1203–28.
- Aisen, A. and Veiga, F.J. (2006). “Does Political Instability Lead to Higher Inflation? A Panel Data Analysis”, *Journal of Money, Credit, and Banking*, Vol. 38 (5), pp. 1379–89.
- Aisen, A. and Veiga, F.J. (2011). “How Does Political Instability Affect Economic Growth?”, *IMF Working Papers*, WP/11/12.
- Burke, P.J., and Leigh, A. (2010). “Do Output Contractions Trigger Democratic Change?”, *American Economic Journal: Macroeconomics*, Vol. 2(4), pp. 124–57.
- Credit Suisse Research Institute. (2011). “From Spring to Revival: Regime Change and Economic Transformation”, pp. 10–14.
- Fischer, S., Sahay, R. and Végh, C. (1998). “From Transition to Market: Evidence and Growth Prospects”, *IMF Working Papers*, WP/98/52.
- Freund, C., and Jaud, M. (2013). “Regime Change, Democracy and Growth”, CEPR Discussion Paper 9282.
- International Monetary Fund. (2012). *Regional Economic Outlook: Middle East and Central Asia* (November; Washington: International Monetary Fund).
- Rasmussen, T.N. (2004). “Macroeconomic Implications of Natural Disasters in the Caribbean”, *IMF Working Papers*, WP/04/224.

DATA APPENDIX

Countries (11) included in this study are Albania, Argentina, Côte d'Ivoire, Honduras, Korea, Madagascar, Myanmar, Paraguay, Philippines, South Africa, and Togo.

Data series are from the IMF's *World Economic Outlook* database, unless mentioned otherwise below:

Real GDP		GDP in constant prices
Unemployment rate		Unemployment rate (in percent)
Inflation		CPI, period average (percent change)
Current Account balance		Current account balance, in percent of GDP
Fiscal balance	<i>World Economic Outlook + Datastream</i>	General government overall fiscal balance, in percent of GDP
Gross public fixed capital formation		Gross public fixed capital formation in current prices, deflated by the CPI
Gross public fixed capital formation		Gross private fixed capital formation in current prices, deflated by the CPI
Gross public consumption		Public consumption expenditure, constant prices
Gross private consumption		Private consumption expenditure, constant prices
General government gross debt	<i>World Economic Outlook + Datastream</i>	Gross debt, in percent of GDP
Foreign Direct Investment	UNCTAD	Data in current U.S. dollars, converted to constant prices by deflating with the U.S. CPI
International reserves		Data in current U.S. dollars, converted to constant prices by deflating with the U.S. CPI
Official Development Assistance	World Bank <i>World Development Indicators</i>	Net official development assistance and official aid received (constant 2008 US\$)
Exchange rate		National Currency per U.S. dollar
Real effective exchange rate	IMF's <i>Information Notice System</i>	Index