

# **RESEARCH PAPER SERIES 02/2017**

# February 1<sup>st</sup> 2017

## Structural reform and productivity growth in Emerging Europe and Central Asia

Yordan Georgiev<sup>1</sup>, Piroska Nagy-Mohacsi<sup>2</sup> and Alexander Plekhanov<sup>3</sup>

#### Abstract<sup>4</sup>

Since 1990, countries in Emerging Europe and Central Asia have undergone comprehensive economic transformation and achieved an impressive degree of income convergence toward the levels of the advanced economies on the back of comprehensive structural transformation that lifted total factor productivity. Yet in recent years the speed of reforms has slowed down markedly and in some cases reform reversals became common. To sustain convergence, greater emphasis needs to be put on structural reforms facilitating innovation and boosting firm productivity while at the same time taking into account the distributional impact of reforms.

Key words: transition, structural reform, economic growth

JEL classification: O57, P24

#### January 2017

<sup>&</sup>lt;sup>1</sup> Bank of England, Threadneedle St., London, EC2R 8AH, UK, ygg@georgetown.edu

<sup>&</sup>lt;sup>2</sup> London School of Economics, Houghton St, London WC2A 2AE, UK, p.m.nagy@lse.ac.uk.

<sup>&</sup>lt;sup>3</sup> European Bank for Reconstruction and Development, One Exchange Square, London, EC2A 2JN, UK, plekhana@ebrd.com

<sup>&</sup>lt;sup>4</sup> The authors are grateful to Erik Berglof, Sergei Guriev, Era Dabla-Norris, Donghyun Park and Jeromin Zettelmeyer for valuable comments and suggestions.

## 1. Introduction

Since 1990, countries in Emerging Europe and Central Asia<sup>5</sup> have undergone comprehensive economic transformation and achieved an impressive degree of income convergence toward the levels of the advanced economies. Yet in recent years the speed of reforms has slowed down markedly and in some cases reform reversals became common, reflected in countries in the region being downgraded in terms of various cross-country measures of economic and political institutions (see EBRD (2013) and Lehne et al., 2014).

This paper revisits the experience with economic growth, income convergence and structural reforms in the Emerging Europe and Central Asia taking into account both the unique transition experience of the early 1990s and the most recent developments following the 2008-09 global financial crisis and moderation of commodity price increases. It looks at the nature of the reforms and their impact on productivity growth and draws insights with respect to the future path of income convergence for the region's economies.

The paper also aspires to contribute to the ongoing research on how to avoid the "middle income trap" or "non-convergence trap" – the notion that going from middle-income to high-income status will require capabilities different from those required at previous stages of development and that countries often experience a sever slowdown in growth rates as they try to make this transition. Transition economies are of particular interest in this regard, because out of only a handful of countries globally that have made it to the high income group since the beginning of the 2000s, many were in Central Europe.

The analysis shows that a number of factors contributed to the rapid income growth between the mid-1990s and the mid-2000s, including better utilisation of existing physical and human capital; entry into the European and global value added chains and deepening of economic and political integration with the European Union (EU)-15 economies and rapid entry of foreign banks and the credit boom that accompanied it. Several countries, clustered in Central Europe, made it to high income group (using the World Bank definition) in a historically short time. Yet by the end of the 2000s, all these drivers had been largely exhausted. Hence the need for the region to pursue a modified growth model.

The challenges faced by the region today are more akin to those faced by middle-income countries elsewhere even though certain legacies of the central planning and the early transition experience persist shaping today's attitudes towards markets and democracy as well as government policies.

The rest of the paper is structured as follows. Section II reviews region's transition experience and patterns of productivity growth since the early 1990s. Section III discusses the impact of structural reforms in Emerging Europe and Central Asia on inequality with particular reference to sustainability of reforms. Section IV looks at the role of external anchors and economic and political integration in

<sup>&</sup>lt;sup>5</sup> The analysis covers Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, FYR Macedonia, Georgia, Hungary, Kazakhstan, Kosovo, the Kyrgyz Republic, Latvia, Lithuania, Moldova, Montenegro, Poland, Romania, Russia, Serbia, the Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

supporting structural reforms and growth in the region. Section V concludes and discusses implications of Emerging Europe's experience for emerging markets in Asia and elsewhere.

## 2. Reforms and productivity in Emerging Europe and Central Asia

#### 2.1. Patterns of convergence

Following the initial transition recession, the Emerging Europe and Central Asia region experienced fast rates of income convergence towards the levels of the G7 advanced economies. At the same time, this convergence was interrupted by the 2008-09 global financial crisis. After the initial post-crisis blip in 2009/10, income convergence has returned but at a slower rate (Chart 1) – although this was somewhat less pronounced in Central Europe (Chart 2). In part, this reflects broader trends in emerging markets (including China, Chart 3). At the same time, various region-specific factors also played an important role.





Sources: IMF, World Bank, national authorities and authors' calculations.

Note: Unweighted average. Calculations at purchasing power parity.



Chart 2. Average income per capita in Central Europe in per cent of the G7 average

Sources: IMF, World Bank, national authorities and authors' calculations.

Note: Simple average of Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic and Slovenia. Calculations at purchasing power parity.





Sources: IMF, World Bank, national authorities and authors' calculations.

Note: Unweighted averages.

#### 2.2. Evolution of total factor productivity

Region's experience of growth and structural transformation has been fairly unique given its starting point in the late 1980s. The central planning economies accumulated relatively *high levels* of physical

capital and human capital (by the standards of developing and emerging market economies). Yet in the absence of market principles and price signals, these resources were often combined inefficiently, resulting in low levels of total factor productivity – the "residual" productivity once labour and capital have been accounted for. For instance, back-of-envelope estimates based on Penn World Tables data on capital stock suggest that back in 1993 region's economies had TFP levels well below those of emerging market economies with similar levels of per capita income (Chart 4).



Chart 4. Per capita income at PPP and total factor productivity in 1993 (log scales)

Sources: EBRD (2013) and authors' calculations, based on data from Penn World Tables, IMF and the World Bank.

The initial set of reforms was implemented shortly after the fall of the Berlin Wall (in 1989) and the dissolution of the Soviet Union (in 1991). There reforms aimed at introducing market interactions with supportive institutions and eventually boosting total factor productivity. They included liberalisation of prices, liberalisation of interest rates and international trade, privatisation of large enterprises, privatisation of small and medium-sized enterprises, laying the foundations of corporate governance and establishing competition rules in the newly-forming markets.

Further reforms aimed at establishing markets in the infrastructure sectors and regulated industries, such as railroads, municipal transport and telecommunications as well as the development of capital markets, non-bank financial services and redesign of pension systems.

The reforms took place alongside a very fast structural transformation away from manufacturing and agriculture and toward a greater role of services. While many other emerging markets, including

China, have been undergoing this shift from a similar point of departure in terms of the starting levels of services value-added-to-GDP ratio (of 35 to 40 per cent), the pace of transformation in Emerging Europe was uniquely high, with services-to-GDP ratio increasing to 55 to 60 per cent in a span of several years in many countries, including Russia (Chart 5).





Sources: EBRD (2016) and authors calculations.

As countries emerged from the initial transition recession, the catch-up in terms of TFP levels enabled by the broad market-oriented reforms was the single most important factor that supported fast income convergence between the mid-1990s and the mid-2000s (Chart 6). No other region experienced such fast productivity growth as the transition region. We note that part of the estimated improvement in total factor productivity may be due to better capacity utilization in the industry, as utilization rates plummeted during the transition recessions of the early 1990s. Both new investment in upgrading existing capacity and establishment of new supply chains helped to raise capacity utilisation over time (Chart 7).



## Chart 6. Cumulative growth, 1993-2010

Sources: EBRD (2013) and authors' calculations.





Sources: Eurostat and authors' calculations.

Contributions from labour and human capital are estimated to have been very modest in contrast as populations often shrank due to low fertility, higher mortality during the early years of transition and high outward migration in many countries in the region. Contribution of physical capital is also estimated to have been small reflecting relatively high stock of capital at the start of transition.

In Emerging Asia, improvements in total factor productivity also made an important contribution to growth over the same period. At the same time, a roughly similar contribution also came from investment in physical capital, resulting in an even faster rate of income convergence. In Latin America and North Africa, increases in labour and physical capital played a key role. Contribution of total factor productivity is estimated to have been particularly small in the case of Latin America, reflected in a more modest rate of economic growth overall.

## Impact of structural reforms

During the 1990s and the first half of 2000s, progress in structural reforms in one period significantly affected growth in the subsequent period, and stronger growth further supported the reform momentum across Emerging Europe and Central Asia (see Falcetti et al., 2006). Quantitatively, the results imply that comprehensive (even if not complete) reform in a certain area given a persistent boost of around 0.8 percentage points to a country's annual growth rate.<sup>6</sup> The impact of reforms is typically realized with a lag of around one year.

While progress in specific structural reforms was closely linked with general improvements in the quality of the business environment, structural reforms had greater power in terms of explaining differences in growth performance of the transition economies in the 1990s than general measures of corruption or the quality of economic institutions (see Abed and Davoodi (2000) for discussion and evidence).

In a broader context, various studies also document the positive impact of structural reforms liberalising labour, product and financial markets on productivity and economic growth. For instance, Bertrand and Kramarz (2002) show that retail trade restrictions inhibit job creation in France. Christiansen et al. (2013) highlight the role of trade and financial sector reforms in supporting productivity improvements. Nicoletti and Scarpetta (2003) show that reforms promoting private governance and competition boost multi-factor productivity in various sectors in the (more developed) OECD economies. Prati et al. (2013) estimate the economic impact of reforms in agriculture, regulated industries and international trade as well as financial liberalisation and find that this impact varies depending on the political system and the distance of to the technological frontier. See also Syverson (2011) for a survey of internal and external factors shaping firm productivity. Dabla-Norris et al. (2016) also highlight that different reforms are needed to boost productivity at different stages of economic development, pointing to the importance of proper sequencing of reforms.

By the mid-2000s, the "low-hanging fruit" of TFP convergence has been largely harvested (see EBRD, 2013). In particular, the levels of TFP in the region became indistinguishable from those in other emerging markets with similar per capita income; and this pattern remained unchanged after the 2008-09 financial crisis (Chart 8).

<sup>&</sup>lt;sup>6</sup> Comprehensive reforms are defined as those corresponding to an increase of around 2.5 points on a scale where a maximum increase is of 3.3 points, see next section for a description of the measurement of reforms.



Chart 8. Per capita income at PPP and total factor productivity in 2007 (log scales)

Sources: Sources: EBRD (2013) and authors' calculations.

#### Outlook

At that point, deeper reforms were needed to boost human capital, physical capital, innovationenabled technological advances and, ultimately, productivity. For instance, recent studies suggest that improvements in the quality of key economic institutions such as rule of law or control of corruption, which would close half of the gap between the levels of the countries in the region and the average levels in the EU-15 economies over a period of twenty years, can boost annual growth in the region by around one percentage point a year – doubling the speed of convergence on current trends (EBRD (2013) and Chart 9).

The next subsection looks at the pattern of structural reforms across the region.



Chart 9. Evolution of GDP per worker (as a share of the EU-15 average) in baseline and reform scenarios

Sources: EBRD (2013) and authors' calculations.

Note: The reform scenario assumes a gradual improvement in the average Worldwide Governance Indicators closing half of the gap in terms of perceived quality of economic institutions between the respective country and the EU-15 average. The baseline scenario assumes unchanged quality of economic institutions as reflected in the averages of the World Governance Indicators.

# 2.3. Speed of structural reform: Evidence from the EBRD transition indicators

To gauge differences in the speed of reform by country, it is useful to examine trends in the transition indicators compiled by the European Bank for Reconstruction and Development (EBRD). These indicators track annual progress in structural reform in the following areas: large-scale privatisation, corporate governance and enterprise restructuring, small-scale privatisation, price liberalisation, trade liberalisation and competition policy. Until 2010, reform scores were also awarded in the areas of banking sector reform, non-bank financial sector, roads, railroads, power, municipal infrastructure and telecommunications. The scores are recorded on a ten-point scale from 1 (no progress) to 4.33 with a notch of 0.33.<sup>7</sup>

Since 2010, structural reforms have been similarly assessed across up to 18 sectors from agriculture to sustainable energy to capital markets, while the country indicators described above were phased out in 2013.

<sup>&</sup>lt;sup>7</sup> The exception is the first notch, whereby the score of 1 is followed by 1.67.

A composite reform indicator for the country can be computed as a simple average of individual indicators.

Over time, the average EBRD transition indicator became closely correlated with measures of the quality of economic institutions such as Worldwide Governance Indicators (WGI, see Kaufmann et al., 2009) or the Doing Business Indicators published by the World Bank Group. However, in 1996, when the first vintage of WGI was released, the correlation between the average of the four economic WGI (the rule of law, control of corruption, government effectiveness and regulatory quality) and the country-level transition indicators was far from perfect, around 0.7 (Chart 10) although it has increased to around 0.9 at present.

This suggests that the indicators did capture important differences in the speed of structural reform in addition to being a proxy for the overall level of quality of economic institutions (broadly defined as the rules of the same in a society, see North, 1990). In particular, in several Western Balkans countries, Slovenia and Belarus market reforms lagged the progress in terms of broad economic institutions capture by the WGI. In contrast, in Central Asia, Russia and the Caucasus market reforms as reflected in the EBRD Transition Indicators tended to progress faster than strengthening of overall economic institutions underpinning the rule of law and control of corruption.





Sources: World Bank, EBRD and authors' calculations.

Note: World Governance Indicators are the average of the rule of law, control of corruption, government effectiveness and regulatory quality.

#### 2.4. Phases of structural reform

#### Broad trends

Former communist countries' transformational experience were unique that in that dismantling their centralised economic structures meant introducing from the outset as much of structural and institutional reforms as it was politically possible. Quite a few, mainly in Central Europe, reformed very fast with "big-bang" type reforms, supported by a twin "bottom-up top down" transformation process of the EU accession and privatisation of production and banking sector assets overwhelmingly to EU-based private companies and banks from the mid-1990s (see Dyson (2006) and Bruszt and Campos, 2016). Others moved more gradually. Overall, faster reforms appear to have produced faster growth and less transitional employment costs than slower reforms, with initial conditions and democratic institutions playing important roles (see, for example, Treisman, 2014). That said, transitional catch-up was possible, as the examples of late reformers such as the Slovak Republic or Georgia demonstrate (EBRD, 2013).

In Central Europe (which comprises the Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic and Slovenia) the reforms proceeded swiftly in the early 1990s and, on this measure, slowed down at a level close to the maximum of the indicator scale set at 4.33 (Chart 11). In contrast, in south-eastern Europe (comprising Albania, Bulgaria and Romania and the former Yugoslavia with the exception of Croatia and Slovenia), reforms initially advanced much slower but continued throughout the 2000s. In the late 2000s, however, they stalled at the level well short of that of Central Europe.

In Russia, reforms advanced relatively rapidly at first but there has been relatively little progress after the 1998 crisis. In Central Asia (comprising Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan) reforms have petered out around the same time but at a lower level of completed transformation, on average. In Eastern Europe (Belarus, Moldova and Ukraine) and the Caucasus (Armenia, Azerbaijan and Georgia) the pattern was similar to that of Central Asia until the early 2000s. Subsequently some reforms advanced further albeit at a slower pace than in the 1990s (for instance, Ukraine's accession to the World Trade Organization was accompanied by some liberalisation in the services sectors as well as tariff reform).



Chart 11. Average country transition indicators

Sources: EBRD and authors' calculations.

Since 2010, the EBRD has been tracking reforms using a similar methodology but looking at individual sectors rather than areas of reform (between 13 and 18 sectors in total). This alternative metric shows that reforms continued to advance slowly during this period. Reversals (downgrades in terms of transition indicators) have become common and the balance of upgrades and downgrades, although varying widely from year to year, is showing an overall downward trend (Chart 12). In fact, the balance of positive and negative changes was close to zero in 2016, the last available year, after turning negative briefly in 2014.



Chart 12. Average sector transition indicators: balance of upgrades and downgrades

Sources: EBRD and authors' calculations.

Note: Average across all countries and sectors.

Economic reforms during the early years of transition went hand-in-hand with reforms aimed at strengthening democratic institutions (and the quality of economic and political institutions remained strongly positively correlated, see EBRD, 2013). This is consistent with the findings of Giuliano et al. (2013) who report that in a broad sample of countries reforms are more likely to take place in democracies and reforms have, in turn, a (weak) impact on democratisation as they strengthen the position of core constituencies for democratisation such as entrepreneurs and small and medium-sized enterprises.

# Phases of reforms

Within countries, different reforms advanced at different speeds. The so-called "first-generation" (market-enabling) reforms – small-scale privatisation and liberalisation of prices, interest rates and international trade – have been implemented relatively fast. In many cases these reforms were completed (in the Central Europe) or significantly advanced (in south-eastern Europe) in a span of several years (Chart 13).



## Chart 13. Average country transition indicators, by phase of reforms

Sources: EBRD and authors' calculations.

Note: Average across all countries and sectors.

The second generation of reforms – the so-called market-deepening measures -- involved large-scale privatisation and establishing the main underpinnings of a commercial banking sector and capital markets. In Central Europe and later in parts of South-Eastern Europe these reforms were boosted by the countries' accession to the European Union, or firmer prospects of the accession. On balance, however, these reforms remained less advanced in all countries (and in Central Asia, Eastern Europe and Russia the gap between the extent of completion of first- and second-phase reforms remains larger than in Central and South-Eastern Europe).

The third generation of reforms (the so-called market-sustaining reforms) focused on creation of key economic institutions underpinning corporate governance and enterprise restructuring, competition policy, property rights and contract enforcement as well as framework for regulated sectors and public-private partnerships in infrastructure. These were typically implemented later, starting in the mid-1990s, and with greater variation across countries. In many countries they remain largely incomplete, although the same is perhaps true of a number of advanced economies.

# The phases of reform in a Neo-Schumpeterian perspective

In general terms, the timing and extent of completion of structural reforms in transition economies of emerging Europe and Central Asia have been broadly consistent with the Neo-Schumpeterian approach which argues that reform priorities and returns to reforms depend on countries' distance to the technological frontier (see, for instance, Acemoglu et al., 2006). Countries further away from the frontier improve productivity predominantly through import of technologies and should thus focus on reforms improving the overall business environment, promoting openness to trade and investment and upgrading basic skills.

In a large sample of countries, Dabla-Norris et al. (2016) find that the impact of structural reform varies by quartile of income per capita into which a country falls – and thus depends on a country's distance

to the technological frontier. Although the pattern is not always clear-cut, lower-income countries appear to benefit from phase I reforms targeting liberalisation of trade and foreign investment. The second phase of reforms concerning labour, product and financial markets has higher dividends in the case of higher-income countries. Prati e al. (2013) also find differential impact of reforms depending on the distance to the frontier.

Consistent with the Neo-Schumpeterian views, the phase I market reforms in Emerging Europe and Central Asia were largely implemented at a time when economies' income per capita in PPP-adjusted terms was typically around 15 to 30 per cent of that of the average of the G7 advanced economies.<sup>8</sup> They were followed by phase II reforms implemented when economies had already achieved some degree of income convergence. Moreover, phase II and phase III reforms have advanced to a greater extent in economies with higher per capita incomes (with causality arguably running in both directions: from income levels to completion of reforms and from structural reforms to faster growth of incomes).

That said, the scope, speed and sequencing of transformational reforms in post-communist countries have had two unique features, particularly the in Central Europe:

- At the beginning of transformation, structural reforms were frontloaded to an extent that was
  largely conditioned by political constraints and initial conditions. More reform was possible in
  countries where external and domestic incentives for reforms were aligned early on. These
  were the countries that made it to the high income group and avoid the middle income/nonconvergence trap since the beginning of this century: Poland, Czech Republic, Hungary,
  Slovakia (with a belated start but strong finish).
- This was an *exceptional clustering of middle income trap avoiding countries*, a phenomenon that may have had to do with a few "leapfrogging" in both policies and institutions of these countries during their transformational process. First, *technology transfer* in terms of adaptation and imitation were accelerated by the rapid integration of global value chains (GVCs) in advanced EU countries such as Germany and Central Europe (Aiyar et al., 2013, and EBRD, 2014). These may have also spurred some "leapfrogging" to technology frontier within these structures in some sectors/firms under GVCs. Outside these structures, imitation of products and processes were generally supported by high level foreign ownership and management in the wake of massive privatisations to EU-based firms and banks. Second, *institutional reform was also accelerated "leapfrogged"* by the requirement of adapting EU (advanced country) legislation as part of the EU accession process ("Acquis Communautaire"). Third, as Bruszt and Campos (2016) point out, *deep economic integration can yield gains in state capacities*, as was the case in Central Europe, supporting a powerful virtuous circle of cross-border integration and domestic institution reform.

<sup>&</sup>lt;sup>8</sup> The G7 economies comprise Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

#### 3. Structural reforms and inequality

#### 3.1. Socio-economic cost of transition reforms

Recent research suggests that structural reforms may be more effective when implemented in a supportive macroeconomic environment, at least in the case of advanced economies (Eggertson et al. (2014); IMF, 2016). This is because labour market reforms may strengthen firms' incentives to hire workers in the long term but at the same time may negatively affect incumbent workers and thus growth of consumption in the short term. Moreover, they have a particularly strong adverse effect on certain groups of individuals. Supportive external environment or deployment of monetary and fiscal stimulus can help to cushion the short-term negative impact of structural reforms on certain population segments (although Caldera et al. (2016), for instance, argue that even in adverse macroeconomic conditions structural reforms can be effective).

In the EBRD region, however, on average the reform momentum generally was stronger during years of more challenging economic conditions – whether in terms of weaker growth or higher fiscal deficit and primary fiscal deficit (net of interest payment). This is a combination of diverging trends during the later and the earlier phases of reforms.

During the later period (2000-2014, after the Asian and Russian crises of 1997-98) greater progress in reforms was indeed associated with stronger fiscal balances. A regression of the annual change in transition indicators on country fixed effects, year fixed effects growth rates and primary fiscal balances suggests that a one percentage point improvement in the fiscal stance is associated with a greater incidence of structural reforms representing a marginal increase of 0.04 of a standard deviation of the annual change (Table 1).

Variable	Change in transition indicator (annual)
Fiscal balance (% of GDP)	0.002** (0.001)
GDP annual growth rate (%)	0.001 (0.001)
Constant	0.062*** (0.013)
No. of observations	419
No. of groups	34
R <sup>2</sup>	0.11

## Table 1. Structural reforms and fiscal stance, 2000-14

Source: Authors' calculations.

Note: Note: Specification controls for time and country fixed effects. Standard errors in parentheses and \*, \*\*, \*\*\* denote values significant at the 10, 5 and 1 per cent respectively.

In contrast, the initial price liberalisation and privatisation reforms took place against the background of a deep recession. As the existing linkages within the central planning economy were being dismantled, production contracted and real incomes and consumption fell sharply. While the transition recession occurred throughout the region, its depth varied between 10 per cent in the Czech Republic and 70 per cent or more in certain Central Asian economies (Chart 14).



#### Chart 14. Cumulative contraction in real GDP

Source: IMF, World Bank, national authorities and authors' calculations.

Note:

The economic hardship caused by the structural shifts accompanying price liberalisation has had longlasting effects. Adsera et al. (2016) find that people born around the year of price liberalisation are on average one centimetre shorter than people born before or after (Chart 15). Only about one third of this effect can be explained by the drop in the average per capita income.



Chart 15. Average height by year of birth, cm

Source: LiTS III and EBRD (2016).

Note: Start of transition is defined as the year of price liberalisation.

Perhaps unsurprisingly, numerous surveys found lower level of life satisfaction in the transition region compared with economies elsewhere that have similar characteristics (see Guriev and Zhuravskaya, 2016). At the same time, the latest survey data (the third round of the Life in Transition Survey conducted by the EBRD and the World Bank in late 2015 – early 2016) suggest that the happiness gap has finally closed and respondents in the region are on average as satisfied with their lives as their counterparts in comparator countries, namely Cyprus, Germany, Greece, Italy and Turkey (Chart 16).



Chart 16. Percentage of respondents who are satisfied with life and per capita income

Source: EBRD (2016).

# 3.2. Structural reforms and inequality

Market-oriented reforms in Emerging Europe and Central Asia also led to a rise in income and wealth inequality (see, for instance, Guriev and Rachinsky, 2006). Some of this increase in inequality has been inevitable and desirable – it was meant to create stronger links between individuals' efforts and rewards and strengthen incentives to pursue entrepreneurial ideas and excel.

At the same time, increase in inequality meant that only a proportion of population, perhaps 44 per cent, experienced income growth above the G7 country average over the long term and thus personally benefitted from income convergence (Chart 17, EBRD, 2016; see also Milanovic and Ersado, 2010). The rest have experienced slower income growth and more than 20 per cent have incomes notionally below those in 1989. By way of comparison, in Turkey, Jordan and North African countries all income deciles experienced per capita income growth in excess of the G7 average over the same period.

These calculations are subject to numerous caveats. In particular, people's ability to spend money under central planning varied vastly and was often based on jobs-related privileges – something not reflected in the official inequality statistics.





Source: EBRD (2016).

Note: Data for each percentile are based on linear extrapolation of averages for each decile.

Nonetheless, the sharp rise in inequality and its impact on income growth as experienced by individuals may explain strengthening pushback against market reforms in parts of the region in recent years.

The experience highlights the importance of taking into account the distributional effects of structural reforms, as losers (even if they are a minority) tend to have a louder political voice than the beneficiaries of reforms.

Moreover, certain reforms may substantially lift the average rate of per capita income growth while benefitting only a minority of the population. Each country's headline income growth since the start of transition is estimated to correspond, on average, to the experience of someone around 75<sup>th</sup> percentile of the income distribution. BY the same token, three quarters of the population have experienced a slower growth (Chart 18 and EBRD, 2016). In contrast, in Egypt, Jordan, Tunisia and Turkey the median citizen experienced income growth above average.



#### Chart 18. Percentiles of population with below-average income growth (1989-2016)

Source: EBRD (2016).

Note:

Structural reforms may also contribute to lowering inequality, in particular if they improve economic opportunities, notably access to education and jobs. For instance, Spilimbergo and Che (2012) find that structural reforms tend to promote convergence between different regions within an economy.

# 4. Structural reforms and external anchors

# 4.1. Economic integration and EU accession

Far reaching structural reforms may not be easy to implement as they face opposition from politicians, vested interests as well as sceptical populations. Economic openness played an important role in anchoring structural reforms throughout the post-communist period, both directly and indirectly, by contributing to productivity growth and thus creating a more accommodative environment for reforms.

While the shares of emerging markets in world output and in global trade generally grew in tandem, European emerging economies came to account for a higher share of global trade compared with their share of world's GDP (Chart 19). This reflects strong inflows of foreign direct investment (FDI) and active integration of the economies in the European and global value chains. The Slovak Republic is an example of an economy where attracting FDI has been the guiding principle of the wave of reforms that started after the 1998 Asian and Russian economic crises.



Chart 19. Shares of global trade and GDP, by region, in %

Source: IMF, WTO and authors' calculations.

Note: Based on exports.

Strikingly, Emerging Europe benefitted more from the rise in global value chains than Emerging Asia, Latina America or Africa (Chart 20). Expansion of global value chains was an important additional factor, which boosted total factor productivity and economic growth in the 1990s and the 2000s, consistent with the finding that economies more open to trade tend to enjoy faster growth (see, for instance, Wacziarg and Welsch (2008) and Christiansen et al., 2013).





Source: WTO and OECD.

The growth of global value added chains has slowed down markedly in recent years contributing to the slowdown in growth of global trade observed since 2011.

In turn, accession to the European Union has been a key driver of trade and investment flows in in Central and South-Eastern Europe and an important anchor of reforms in the region. On average, reforms tended to accelerate in the years leading up to the accession (Chart 21). They also tended to slow down markedly in the subsequent years, once the accession process was complete.





Source: Worldwide Governance Indicators and authors' calculations.

Note: Year zero corresponds to the year of EU accession. The indicators are on a -2.5 to 2.5 scale, with a standard deviation of 1.

### 4.2. FDI and non-FDI capital flows and foreign bank ownership

During the 2000s, Emerging Europe also saw a period of exceptionally high FDI and non-FDI capital inflows on the back of deeper economic and political integration. The inflows averaged 9 per cent of recipient countries' GDP during 2002-08, compared with 4 to 5 per cent in Emerging Asia and 3 to 4 per cent in Latin America (Chart 22). In part, these inflows facilitated integration of these economies into European and global value added chains.



Chart 22. Average net non-resident private capital flows, % of GDP

Source: IIF and authors' calculations.

Note: Values for 2016 are IIF forecasts based on trends observed in the first half of the year.

They also reflected entry of foreign banks (predominantly European) and a sharp increase in the share of foreign banks in total banking assets. By mid-2000s, these shares reached between 60 and 100 per cent in many countries in the region (Chart 23). Rapid entry of foreign banks helped technology transfer and capital inflows, but also fuelled a domestic credit boom (see, for instance, de Haas and van Lelyveld, 2006), wide-spread lending in foreign currency to unhedged households and small and medium-sized enterprises (see Zettelmeyer et al., 2010) and thus contributed to the depth of the recession following the 2008-09 financial crisis. Indeed, as foreign banks have been withdrawing cross-border funds from the region (see de Haas et al (2015) for a discussion), countries experienced a major credit crunch and protracted episodes of deleveraging.



## Chart 23. Share of foreign banks in total bank assets, %

Source: Claessens and Van Horen (2015).

Note: Based on 2009 data.

Ample availability of cross-border finance supported improvements in capital stock and total factor productivity contributing to economic growth. This is in sharp contrast with many experiences of capital inflows into other emerging market regions which, if anything, tended to have negative longer-term growth effects as they have not been accompanied by the same degree of deepening of economic and political ties with "creditor" economies (see EBRD (2009) and Friedrich et al., 2013).

# 4.3. External anchors beyond the EU membership

Not all countries in the region had clear prospects of EU accession. Many countries used different external policy benchmarks, such as accession to the World Trade Organization (WTO) or the Organisation for Economic Cooperation and Development (OECD), to anchor certain structural reform agendas.

Since 2008, Russia has pursued a project to turn Moscow into a major international financial centre, a similar goal has been stated by Kazakhstan. A menu of reforms within the financial sector and beyond can increase productivity in the economy regardless of whether the ambition of developing a major financial centre is ultimately realised. Example include legislation supporting derivative transactions or legislation making it easier to hire international experts.

The World Bank *Doing Business* survey is another example of a useful external benchmark widely used across the region. A number of countries, including Belarus and Russia, have adopted formal targets in terms of improved *Doing Business* ratings. Evidence suggests that the resulting "yardstick

competition" can be effective (see, for instance, Besley and Case (1995) for evidence from the US states).

Russia and Kazakhstan subsequently had regional Doing Business surveys conducted to zoom on the intra-country differences in business environment. Evidence suggests that the business environment in large countries in the region indeed varies vastly from region to region (see, for instance, Isakova and Plekhanov, 2011). Grounded in such surveys, review and exchange of best practices among individual regions can help to advance business environment reforms.

Russia offers an example of the importance of local and regional institutions for the success of economic reform. Between 2001 and 2004 several new laws limited business inspections, exempted many activities from licensing requirements and introduced a notification-based system for firm registration, eliminating the need to wait for authorisation from various government agencies. The results differed widely across regions. In some regions, improvements were swift and sizable, according to subsequently conducted surveys. In others (generally regions with weaker governance) firms continued to be inspected far more frequently than legally permitted, licences were still necessary for activities where they were no longer legally required and authorisations still needed to be sought from various agencies for firms to start operations (see Yakovlev and Zhuravskaya (2013) and EBRD (2012) for evidence and discussion).

The Eurasian Economic Union, a supranational economic project involving Armenia, Belarus, Kazakhstan, the Kyrgyz Republic and Russia, may in principle facilitate structural reforms in areas of competencies of supranational bodies (such as competition policy and certain areas of trade policy) although little evidence of this approach being actually pursued is available to date (see EBRD (2012b) and Isakova et al. (2016) for an early discussion).

# 5. Conclusion

This paper examined the experience with structural reforms in Emerging Europe and Central Asia since the start of transition from planned to market economy taking into account the most recent developments following the 2008-09 global financial crisis, the Great Recession that followed with the associated collapse in most commodity prices.

Simultaneous and historically rapid market-oriented structural reforms and institutional transformations played crucial roles in supporting income convergence in region's economies towards the income levels of advanced countries. The effect has been particularly strong during the period when total factor productivity levels in the region were low relative to countries' endowments of labour, human capital and physical capital as well as their levels of per capita income. Phase I and Phase II market reforms played an important role in supporting reforms and promoting convergence, as did economic and political integration in the context of accession of economies in Central and South-Eastern Europe to the European Union. The result was the emergence of a "cluster" of countries in Central Europe that managed to jointly avoid the middle income or non-convergence trap and enter the club of high income countries.

However, reforms were associated with significant hardship, in particular during the early years of transition. People born around the year of price liberalisation are around one centimetre shorter, on average, than those born before or after, an effect comparable to that of being born during an armed

conflict. The transition also had a profound impact on average degree of life satisfaction. It took around two and a half decades for the happiness gap between the economies in the region and other emerging markets with comparable characteristics to close.

The increase in inequality from the notionally low levels that prevailed throughout the region under central planning also meant that for most people the rates of income growth that they personally experienced have been considerably lower than the averages reported in the national accounts for their respective countries. Over time, this contributed to substantial weakening of support for market and institutional reforms, with non-negligible risks of backsliding

Going forward, designing and implementing structural reforms that appropriately correspond to the level of development – distance to frontier - are likely to present greater challenges. As support for markets and democracy in parts of the region has been weakening, particular attention needs to be paid to distributional consequences of reforms.

# Implications for emerging markets in Asia and elsewhere

Emerging Europe's experience holds lessons for other emerging markets, in Asia and elsewhere.

First, region's experience suggests that a unique comparative advantage that underpins rapid growth can be negated by economic convergence within a decade or two. In the case of Emerging Europe, this advantage was relatively high levels of physical and human capital relative to total factor productivity. For many countries in Emerging Asia, this is relatively cheap labour, often English speaking, and countries' locations on major shipping routes. As rapid growth and convergence naturally erode such advantages (by closing the gap in terms of TFP or in terms of workers' pay relative to their productivity), the economic model underpinning convergence needs to adjust and such adjustment requires change of economic policies.

Second, economic transformation in Emerging Europe arguably involved structural transformation on a uniquely large scale. It came with substantial hardship in the short run but paid off in terms of growth dividends in the long run. For more localised structural reforms, the payoff period may be shorter but a period of hardship may still ensue.

Third, structural transformation entailed increase in inequality and resulted in highly uneven distribution of economic dividends. This, over time, led to weakening of public support for reform, a more modest reform momentum and the rise of populist politicians in a number of countries. In Emerging Asia, the inequality pattern has been similar but the levels of growth in many countries have been fairly high even for the worse-off. If growth slows, support for structural reforms may weaken unless dividends of growth become shared more widely. Indeed, in countries with relatively more modest long-term growth performance, such as the Philippines, political populism has been on the rise. This underscores the importance of designing growth policies with the short-term distributional impact in mind, thus ensuring that support for the growth agenda is not eroded and strengthening of economic institutions continues.

Fourth, as economies pass the upper-middle income threshold, weaknesses of economic institutions such as property rights, the rule of law and the quality of governance become increasingly important constraints in terms of economic convergence, largely because institutional deficiencies make it more

difficult for countries to move from being recipients and utilisers of knowledge to becoming creators and exporters of ideas.

#### References

Abed, George T., and Hamid R. Davoodi, 2000, "Corruption, Structural Reforms, and Economic Performance in the Transition Economies", IMF Working Paper 00/132.

Acemoglu, Daron, Philippe Aghion and Fabrizio Zilibotti, 2006. "Distance to Frontier, Selection, and Economic Growth," *Journal of the European Economic Association*, Vol. 4, No1, pp. 37-74.

Adsera, Alicia, Francesca Dalla Pozza, Sergei Guriev and Lukas Kleine-Rueschkamp, 2016, "The impact of transition on well-being", EBRD Working Paper, forthcoming.

Aiyar, Shekhar, Bartek Augustyniak, Christian Ebeke, Ehsan Ebrahimy, Selim Elekdag, Nir Klein, Subir Lall, Hongyan Zhao and Dirk Muir, 2013, "German-Central European Supply Chain – Cluster Report", IMF Country Report 13/263, 2013.

Bertrand, Marianne and Francise Kramarz, 2002, "Does Entry Regulation Hinder Job Creation? Evidence from the French Retail Industry," *Quarterly Journal of Economics*, Vol. 117, pp. 1369-1413.

Besley, Timothy, and Anne Case, 1995, "Incumbent Behavior. Vote-Seeking, Tax-Setting, and Yardstick Competition", *American Economic Review*, Vol. 85, No 1, pp. 25–45.

Bruszt, Laszlo, and Nauro Campos, 2016, "Deep Economic Integration and State Capacity: The Case of the Eastern Enlargement of the European Union", Central European University, Mimeo.

Caldera, Aida, Alain de Serres and Naomitsu Yashiro, 2016, "Reforming in a difficult macroeconomic environment: A review of the issues and recent literature", OECD Working paper 1297.

Christiansen, L., M. Schindler and T. Tressel, 2013, "Growth and structural reforms. A new assessment", *Journal of International Economics*, Vol.89, pp. 347-56.

Claessens, Stijn, and Neeltje van Horen, 2015, "The impact of the global financial crisis on banking globalization", *IMF Economic Review*, Vol. 63, pp. 868-918.

Dabla-Norris, Era, Giang Ho and Annette Kyobe, 2016, "Structural Reforms and Productivity Growth in Emerging Market and Developing Economies", IMF Working Paper 16/15.

De Haas, Ralph, and Iman van Lelyveld, 2006, "Foreign Banks and Credit Stability in Central and Eastern Europe. A Panel Data Analysis", *Journal of Banking and Finance*, Vol. 30, pp. 1927-1952.

De Haas, Ralph, Yevgeniya Korniyenko, Alexander Pivovarsky and Teodora Tsankova, 2015, "Taming the Herd? Foreign Banks, the Vienna Initiative and Crisis Transmission", *Journal of Financial Intermediation*, Vol. 24, pp. 325-355.

Dyson, Kenneth, ed., 2006, *Enlarging the Euro Area: External Empowerment and Domestic Transformation in East Central Europe*, Oxford University Press.

EBRD, 2009, Recovery and Reform, Transition Report 2009, London: EBRD.

EBRD (2012) "Diversifying Russia: Harnessing regional diversity" EBRD report.

EBRD (2012b) "Integration across borders" Transition Report 2012.

EBRD (2013) "Stuck in Transition?" Transition Report 2013.

EBRD (2016), "Transition for all: Equal opportunities in an unequal world", Transition Report 2016-17.

Eggertsson, Gauti, Andrea Ferrero and Andrea Raffo, 2014, "Can structural reforms help Europe?," *Journal of Monetary Economics*, Vol. 61, pp. 2-22.

Falcetti, Elisabetta, Tatyana Lysenko, and Peter Sanfey, 2006, "Reforms and Growth in Transition: Re-Examining the Evidence", *Journal of Comparative Economics*, Vol. 34, No 3, pp. 421–45.

Friedrich, Christian, Isabel Schnabel and Jeromin Zettelmeyer, 2013, "Financial integration and growth—Why is Emerging Europe different?" *Journal of International Economics*, Vol. 89, No 2, pp. 522-38.

Giuliano, Paola, Prachi Mishra and Antonio Spilimbergo, 2013, "Democracy and Reforms: Evidence from a New Dataset", *American Economic Journal: Macroeconomics*, Vol. 5, pp. 179-204.

Guriev, Sergei, Alexander Plekhanov, and Konstantin Sonin, 2012, "Development Based on Commodity Revenues", in Bertrand Munier, ed., *Global Uncertainty and the Volatility of Agricultural Commodity Prices*, IOS Press, pp. 75–110.

Guriev, Sergei, and A. Rachinsky, 2006, "The Evolution of Personal Wealth in the Former Soviet Union and Central and Eastern Europe", UNU-WIDER Working Paper No. 2006/120.

Guriev, Sergei, and Ekaterina Zhuravskaya, 2009, "(Un)happiness in Transition", *Journal of Economic Perspectives*, Vol. 23, pp. 143-168.

IMF (2016), "Time for a Supply-Side Boost? Macroeconomic Effects of Labor and Product Market Reforms in Advanced Economies", World Economic Outlook, April, Chapter 3.

Isakova, Asel, and Alexander Plekhanov, 2011, "Region-Specific Constraints to Doing Business: Evidence from Russia", *Aussenwirtschaft: The Swiss Review of International Economic Relations*, Vol. 2011, No 2, pp. 181–210.

Isakova, Asel, Zsoka Koczan and Alexander Plekhanov, 2016, "How much do tariffs matter? Evidence from the customs union of Belarus, Kazakhstan and Russia", *Journal of Economic Policy Reform*, Vol. 19, pp. 166-184.

Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi, 2009, "Governance Matters VIII: Governance Indicators for 1996–2008", World Bank Policy Research Working Paper 4978.

Lehne, Jonathan, Jeffrey Mo and Alexander Plekhanov, 2014, "What determines the quality of economic institutions? Cross-country evidence", EBRD Working Paper 171.

Milanovic, Branco, and Lise Ersado, 2010, "Reform and inequality during transition: An analysis using household survey data, 1990-2005", UNU-WIDER Working Paper 2010-62.

Nicoletti. G., and S, Scarpetta, 2003, "Regulation, Productivity and Growth: OECD Evidence", *Economic Policy*, Vol. 18, pp. 9-72.

North, Douglas, 1990, *Institutions, Institutional Change, and Economic Performance*, Cambridge University Press.

Prati, A., M. Onorato and C. Papageorgiu, 2013, "Which reforms work and under what institutional environment? Evidence from a new dataset on structural reform", *Review of Economics and Statistics*, Vol. 95, pp. 946-68.

Spilimbergo, Antonio, and Natasha Che, 2012, "Structural reform and Regional Convergence", IMF Working Paper 12/106.

Syverson, Chad, 2011, "What determines productivity?", *Journal of Economic Literature*, Vol.49, pp. 326-65.

Treisman, Daniel, 2014, "The Political Economy of Change after Communism", in A. Aslund and S. Djankov., eds, *Great Rebirth: Lessons from the Victory of Capitalism over Communist*, PIIE.

Wacziarg, R., and K. Welsch, 2008, "Trade Liberalization and Growth: New Evidence", *World Bank Economic Observer*, Vol. 22, pp. 187-231.

Yakovlev, Evgeny, and Ekaterina Zhuravskaya, 2013, "The Unequal Enforcement of Liberalization: Evidence from Russia's Reform of Business Regulation," Journal of the European Economic Association, Vol. 11, pp. 808-838.

Zettelmeyer, Jeromin, Piroska Mohacsi Nagy and Stephen Jeffrey, 2010, "Addressing private sector currency mismatches in emerging Europe", EBRD Working Paper 115.