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Monthly Report

Income Convergence in CESEE Countries

The Nagorno-Karabakh Confrontation and the Internationalisation of the Conflict

Generation Lost: The Social and Economic Consequences of the Protests in Belarus

Return of the Progressive Tax





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ALEXANDRA BYKOVA BRANIMIR JOVANOVIC ARTEM KOCHNEV SERGEY MARKEDONOV

Announcement: New wiiw Handbook of Statistics

As a wiiw Member you will soon receive an email notification about the *wiiw Handbook of Statistics 2020*, including a link to download the PDF version. In line with our environmentally friendly policy, we no longer publish a printed version of the Handbook and hope for your understanding.

Subscribers to our Premium Membership will also be able to download the **electronic version** of the Handbook, which contains **MS-Excel tables with longer time series** from 1990 onwards, giving you access to a wide range of analyses according to your needs. (A PDF version is included as well.) Subscribers to our Basic Membership and the broad public can order the electronic version online at https://wiiw.ac.at/wiiw-handbook-of-statistics-ps-12.html, where you can also find a detailed description of the Handbook, including sample tables.



Handbook of Statistics 2020

Central, East and Southeast Europe

Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kazakhstan, Kosovo, Latvia, Lithuania, Moldova, Montenegro, North Macedonia, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, Ukraine

The Vienna Institute for International Economic Studies Wiener Institut für Internationale Wirtschaftsvergleiche

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Chart of the month: Income convergence in **CESEE** countries

BY ALEXANDRA BYKOVA

less than 10000 10001 - 20000 20001 - 25000 25001 - 30000 30001 - 40000 Kilometers 500 1,000 more than 40001

Gross domestic product per capita in EUR at PPPs, 2019

Note: Background data for the chart and the analysis will be available in the wiiw Handbook of Statistics 2020, Chapter I. Cross-country overview, Table I/5 / Gross domestic product per capita at PPPs and Table I/6 / Gross domestic product per capita at PPPs relative to EU27 (forthcoming).

Source: wiiw Handbook of Statistics 2020 (forthcoming) incorporating national and Eurostat statistics.

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Despite the continuing convergence process in most Central, East and Southeast European (CESEE) countries, none of them exceeded the EU27 average GDP per capita (at PPPs) of EUR 31,160 in 2019. Large disparities persist inside the CESEE region, with per capita income ranging between 93% of the EU27 average in the Czech Republic and 26% in Kosovo.

The convergence process has been more successful for the Central and East European EU (EU-CEE) economies, which have benefited from closer trade and investment integration with Western Europe and from EU budget transfers. Among them, only Bulgaria and Croatia are still below the income level of Greece – the poorest West European country, while the Czech Republic, Slovenia, Estonia and Latvia are now wealthier than Portugal – the second-poorest West European country. Moreover, the Czech Republic, with a per capita GDP at PPPs of EUR 29,000, is also richer than Spain and Cyprus. By contrast, Kosovo, Ukraine, Moldova and Albania, which all had a per capita income below EUR 10,000 in 2019, still have a long way to go.

Romania posted an outstanding speed of convergence in 2019 as well as over the last five years, gaining 4 and 14 percentage points, respectively, relative to the EU27 average. The opposite was true for Turkey, Russia and Belarus, where per capita income relative to the EU27 average deteriorated both over the five-year period and in 2019.

Opinion Corner*: The Nagorno-Karabakh confrontation and the internationalisation of the conflict

BY SERGEY MARKEDONOV¹

The new military escalation in the South Caucasus between Armenia and Azerbaijan has exceeded all previous confrontations in terms of intensity, scale, geographical composition and influence on the neighbours as well as the great powers. This article argues that it opens up new possibilities for Turkey and Iran and reinforces the 'non-polar' world order, creating rifts in long-established alliances.

BAKU HAS GAINED THE UPPER HAND

On 27 September 2020 the military conflict between Armenia and Azerbaijan escalated significantly. The two countries are engaged in a long-term ethno-political conflict over Nagorno-Karabakh, a small territory in the South Caucasus with an area of only 4,400 km². Armenia and Azerbaijan have survived periodic outbursts of violence in recent years, but the current fighting is the most serious since the two countries signed a ceasefire agreement in May 1994, exceeding in scale both the four-day war of April 2016 and the inter-state border escalation in July this year.

The status quo that had been maintained in the Armenian-Azerbaijani conflict zone in Karabakh for almost 26 years is now broken. In its former shape the 'line of contact' no longer exists. The military operations have been transferred to the territory of the unrecognised Nagorno-Karabakh Republic (NKR) as well as to the Azerbaijani areas occupied by Armenian troops in the early 1990s. Although the military maps presented to the public in Baku and Yerevan do not match, both sides recognise the recent changes of the territorial configuration as a result of the advance of the Azerbaijani army. This gives impetus to Azerbaijan, but in return it makes Armenia and the unrecognised NKR fight for every square metre. A new status quo is being formed, and each party wants to ensure the best possible result before sitting down at the negotiating table. Azerbaijan has a better chance of negotiating from a position of strength.

At the same time a new surge in the armed confrontation between Armenia and Azerbaijan has clearly demonstrated a trend towards the internationalisation of an old ethno-political conflict. It went far beyond the borders of a single region of the former USSR. In particular, a new round of military escalation in Nagorno-Karabakh marked a close connection between the South Caucasus and the Middle East. The conflicting parties themselves accused each other of transferring militants from the Middle Eastern countries to the South Caucasus. The world's leading media resources, as well as politicians and representatives of the intelligence community of various countries, spoke on this topic. The extent of the

^{*} Disclaimer: The views expressed in the Opinion Corner section of the Monthly Report are exclusively those of the authors and do not necessarily represent the official view of wiw.

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penetration of Middle Eastern jihadists in the South Caucasus countries and their role in the possible destabilisation of the region as a whole will have to be properly assessed in the future. However, it is already clear that the risks of exporting instability from Syria to Azerbaijan, Armenia and potentially Georgia as well as Russia's North Caucasus are extremely high.

THE ROLES OF TURKEY AND IRAN

The September escalation stands out sharply against the background of all previous cases of militarypolitical and diplomatic involvement of Turkey in the conflict, which prior to 2020 had been considered the subject of special attention of Moscow. Russia's role as the main mediator in the conflict settlement was also recognised by the United States and France, the other two co-chairs of the Minsk Group of the Organisation for Security and Co-operation in Europe (OSCE) charged with conflict resolution. Despite all growing contradictions and fundamental differences on the international and especially on the Eurasian agenda, Washington, Moscow and Paris have continued their joint efforts to resolve the Armenian-Azerbaijani conflict. Furthermore, the aggravation of the situation in Nagorno-Karabakh in September 2020 has not changed this order of things.

However, Ankara has in fact challenged the dominance of the 'Big Trio', openly accusing the OSCE Minsk Group co-chairs of diplomatic inefficiency and declaring itself to be the most important (and almost decisive) factor in shaping the foundations of a peaceful settlement in the new conditions, and potentially in the entire security architecture of the Caucasus region as a whole. Taking into account certain discrepancies between the positions of Moscow and Ankara in other regions such as Syria, Libya and the Black Sea region, the new Turkish activism near Russia's southern borders also creates additional conflict potential. The problem is that Russia and Turkey can potentially use their controversies in the different regions in order to contain each other (for example, they can start some offensives in Syria to secure the best positions for the deal in the South Caucasus, and vice versa).

The proliferation and scale of the military operations, as well as the destruction and intransigence of the conflicting parties, raise the question of conducting a peace guarantee operation. Since 2009 the so-called 'basic principles' supported by the OSCE Minsk group have become the common ground for the resolution of the conflict. They offer the deployment of international peacekeepers between the two conflicting parties. However, in this case the role of Iran, which has consistently opposed the 'basic principles' of a peaceful settlement, will increase significantly. Tehran's opposition to the deployment of foreign peacekeeping forces may add additional complexity to the conflict resolution process.

THE NAGORNO-KARABAKH CONFLICT AND THE 'NON-POLAR' WORLD ORDER

The Nagorno-Karabakh conflict has seriously contributed to the international order, metaphorically defined by the distinguished US diplomat and political thinker Richard Haass as 'non-polar'. Indeed, the different reactions of individual global players to the outbreak of the Armenian-Azerbaijani military confrontation have shown that traditional unions and integration associations do not guarantee the common views of their participants. In this sense the position of Russia and Iran, which insist on an immediate ceasefire, and the lack of alternatives to diplomatic methods of resolving the conflict are, in fact, much closer to the position of such NATO members as the United States and France than to the position of Turkey, which is formally an ally of Washington and Paris. Meanwhile, Ankara prefers

unilateral support for Azerbaijan, which is not formally part of the same military-political bloc with the Americans, the French and the Turks.

The Karabakh conflict was an issue (though not a top priority) for the US presidential campaign and features prominently on the domestic political agenda of Turkey and France. The Armenian-Azerbaijani confrontation itself did not open up new tensions between Paris and Ankara – they had already been accumulating around problems in the Mediterranean Basin, where Turkey is claiming rights to the newly discovered gas deposits. However, the escalation in the South Caucasus has become an important driver of the deepening Franco-Turkish split. The echoes of the military confrontation in Karabakh have been clearly heard in Georgia which is neighbouring Armenia and Azerbaijan, once again highlighting the internal and external vulnerability of the country and the potential 'dilemmas of the alliance' in relations between Tbilisi and NATO.

Finally, the new round of the Armenian-Azerbaijani conflict has updated Russia's role in its settlement and highlighted additional risks associated not with the traditional pressure on Moscow from the West but with the growing ambitions of various regional players and non-state actors (various jihadist militant groups). Moscow is also faced with the need to maintain a careful balance of interests between Armenia and Azerbaijan, which are both members of the Commonwealth of Independent States (CIS) and important to Russia but are openly hostile towards each other.

Thus the Nagorno-Karabakh conflict is not just a regional confrontation that dates back to the collapse of the USSR. The interests of the various external players are focused on the growing Armenian-Azerbaijani hostilities. Their approaches are based not on belonging to a particular bloc or integration structure but on individual approaches, both to the conflicting parties themselves and to the prospects for a peaceful settlement. No less important is the fact that external players are building their tactical and strategic line of behaviour towards the Karabakh issue, linking it with the dynamics in other regions, whether it is the Middle East, the Mediterranean Basin, the Black Sea region or the domestic political agenda, which gives the confrontation between Armenia and Azerbaijan an added political significance.

Generation lost: The social and economic consequences of the protests in Belarus

BY ARTEM KOCHNEV¹

The political crisis in Belarus is weighing heavily on the economy, which is still exposed to the twin risks of sovereign debt and a banking-sector crisis. Even if the current elites manage to avoid a balance-ofpayments crisis, the long-term prospects for their stay in office are gloomy. By rejecting fair political competition and government accountability they are giving a strongly negative signal to those individuals who create the highest value added in the local economy. The result would be forgone investment opportunities and long-term stagnation.

The Belarusian economy is facing some challenging tests just now. While most of the commentators are currently focusing on the dynamics of the political contest between the government and the public following the (probably rigged) presidential election in August 2020, the widening economic imbalances remain largely unreported. Yet whatever the outcome of the political confrontation is going to be, the Belarusian leadership will have to deal with long-standing issues of the local economy, some of which have become acute amid the protests. The goal of this article is to highlight the economic risks that have already materialised and to give an overview of the challenges that the ongoing political confrontation has already brought about and which are likely to persist in the future.

FINANCIAL SECTOR: THE WEAKEST LINK

When the protests started, all eyes were on the largest industrial enterprises to see whether they were going to join the national strike. The financial sector largely evaded the international news coverage, despite being hit hard in August.

Over the past years international finance has been one of the main issues of Belarus's economic model (Adarov et al., 2016). The state-led support of small and medium-sized enterprises (SMEs) and stateowned enterprises (SOEs) was actively financed through borrowing on external financial markets and from Russia. Consequently, 81% of the public debt is denominated in foreign currency, which makes the public sector particularly sensitive to foreign-exchange (FX) rate movements (Fitch, 2020). Belarus already experienced multiple episodes of simultaneous currency depreciation and inflation spikes in the post-2008 period, which taught the local population to anticipate the loss in purchasing power of the national currency at the first signs of economic turbulence (Koshkina, 2020).

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Therefore it came as no big surprise when Belarus's financial sector experienced a mild bank run in August 2020. With political uncertainty rising amid the protests, retail depositors started to withdraw savings from their accounts and convert them into hard currency. Over a single month the volume of retail deposits in the banking sector dropped by about 12% (Figure 1), with the FX rate sliding by 8% against the euro (Figure 2).





Note: Right panel: interest rates on domestic currency deposits (left-hand scale), interest rates on foreign currency deposits (right-hand scale).

Sources: Investing.com; NBS 2020c.

The response of the banking sector and the regulator was standard. Commercial banks started to actively borrow on the money market to cover the rising liquidity gap, raised rates for term deposits at short maturities to increase the opportunity costs of deposit withdrawal (Figure 3), and limited cash withdrawal from ATMs. At the same time the National Bank intervened in the market through the active sale of foreign-currency reserves.

The reaction of the banking sector helped to overcome the developing panic, with expectations, judging from FX rate movements, seeming to stabilise. This came, however, at the cost of international reserves, extra borrowing from Russia and a decline in the profit margin of the banking sector due to the rising rates of term-deposit products.

THE COSTS AND RISKS OF STABILISATION

Since Belarus's public debt is largely denominated in foreign currency, a depreciation of the national currency will lead to a sizable increase in public debt. For this reason, and even though the monetary policy of Belarus is formally dedicated to the goal of price stability, the regulator must actively intervene on the FX market at the first signs of panic on financial markets to keep debt-service costs under control.

But as the data show, the National Bank is running out of steam. Interventions to counteract the recent depreciation of the FX rate had consumed 16% of the international reserves as of end-August 2020, bringing the National Bank close to the internally defined minimum (NBS, 2020b). The recently arranged USD 1.5 million facility with Russia compensates almost exactly for this decline and is likely to have helped to calm down the market for a while.² There are, however, certain doubts as to whether the volume of additional financing is going to be enough to keep the situation stable until the end of the year. The exact volume of future deposit withdrawals is hard to evaluate. We can, however, estimate the upper bound, which is defined by the amount of retail FX deposits in the banking system. As of 1 October 2020 this volume amounted to USD 6 billion. The volumes are not extremely big and can be covered by the international reserves of the National Bank – estimated at USD 7.5 billion on the same reporting date – if it manages to supply FX currency to the markets on time. Yet as experience of FX crises shows, central banks frequently miscalculate the volumes of required currency interventions amid financial panic (Obstfeld et al., 1996).

With the recovery of the world economy being threatened by the current second wave of COVID-19 and continuing tensions between the protesters and general government, the uncertainty is likely to prevail in the coming weeks. It is not clear if the National Bank has enough resources to dampen each episode of panic on the FX market. For Belarus this represents a double risk, because any significant depreciation of the Belarusian ruble is likely to trigger another run on the country's banks, which might result in a full-scale banking-currency crisis. Should this scenario materialise, it might require a massive capital injection into both banks and the largest SOEs. As 2008 has taught us, bailouts have proved to be costly for government budgets in the past (see Figure 3).

² Even though the decision by Russia to disburse the loan almost certainly had a political rationale, it also had a strong economic component. Therefore, when President Putin said that this loan is 'to help' a 'brother nation', he was not as hypocritical as some have claimed. Still, this decision clearly demonstrated the Kremlin's renewed commitment to support President Lukashenko. It helped to contain rising uncertainty on the FX market, dampen inflation expectations and avoid an uncontrolled increase of public debt.



Figure 3 / Output loss and increase in public debt after systemic banking crises since 2008

Notes: Output losses are computed as the cumulative sum of the differences between actual and trend real GDP over the period [T, T+3], expressed in % of trend real GDP computed by applying an HP filter (λ =100) to the GDP series over [T-20, T-1]; the increase in public debt is measured as the change in debt projections, over [T-1, T+3], relative to the pre-crisis debt projections, where T is the starting year of the crisis. The estimated relationship implies that each percentage point of cumulative GDP decline is on average associated with a 0.4 percentage point increase of public debt (measured as % of GDP). The sample includes the crisis instances per each country (that is, a single country can appear twice) since 2008: Austria, Belgium, Cyprus, Denmark, France, Germany, Greece, Guinea-Bissau, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Luxembourg, Moldova, Mongolia, Netherlands, Nigeria, Portugal, Russia, Slovenia, Spain, Sweden, Switzerland, Ukraine.

Source: Laeven and Valencia (2020).

Given the high degree of foreign-currency denomination of the public debt and its high level, Belarus has limited space for increasing the level of fiscal deficit. Increasing the leverage might make public debt unsustainable and transform the banking/currency crisis into a sovereign debt crisis. Should this happen, the country will have to enter into hard talks with its major creditor – Russia.

Moscow will most probably agree to restructure the Belarusian debt, as it has already done multiple times for Cuba, Venezuela and Belarus itself. Past experience and recent news suggest the price tag: closer alignment of its national foreign policy with Moscow (at least at the level of official rhetoric), greater integration into the Eurasian economic space, and increased military cooperation (Rbc.ru, 2020a).³ Even though this will not necessarily be harmful for the Belarusian economy per se – after all, economic integration with Russia will allow local companies to enjoy easier access to the bigger market – but it will at the same time weaken the resilience of the local economy. All potential political issues aside, this approach would simply be a risky economic policy for Belarus, because its trade and investment links with Russia are already very close, making the Belarusian economy highly exposed to idiosyncratic risks of economic shocks in Russia.

³ Some observers wonder why the Russian elites support a leader who has lost his legitimacy and has frequently used anti-Russian rhetoric when it was convenient (Trenin, 2020). One reason could be that the Kremlin seeks benefits from the weak elites in Belarus to gain greater economic or political assets in the future. If the leader stays in power only because of an external back-up, this might be used as a lever to manipulate him.

THE BIG VALUE SHIFT

The instability of the financial sector and public debt are, however, only part of the story. Another big issue is Belarus's long-term modernisation strategy, which has two components: the change of social values from material to post-material ones, and the change from an economy of replication to an economy of creation.



Figure 4 / Evolution of the post-materialism index in Belarus and Poland

Notes: The post-materialism index is constructed based on respondents' answers to three questions, each containing four items: two reflect physiological needs (personal and country protection, economic well-being), and the other two reflect psychological needs (value of ideas and aesthetic, personal freedom and ability to drive change in society). The rankings assigned by respondents to three questions receive a respective score along the materialism/post-materialism scale and are aggregated to construct a single-value index for each person. For details on constructions, see Inglehart (1977). Source: WVS (2015), version as of 18 April 2015.

In terms of social change, modern Belarus has experienced a slow but measurable change in social values. What we see in the data is that the local population has started to place more emphasis on non-material values such as freedom of speech and the ability to participate in government decisions. Figure 4 shows that although this process advanced at a slower pace than in Poland, it still had a measurable effect long before the current protests unfolded.

This change is not unique for Belarus. It fits a global pattern observed by sociologists in long-term studies of social values: countries with greater economic security are characterised by greater demand for self-expression (Inglehart and Baker, 2000). As the left-hand panel of Figure 5 shows, nations characterised by more productive economies also score more highly on the post-materialism index.

Currently the upper-right quadrant is dominated by West European and English-speaking countries. Yet these societies did not inherit this particular set of values a long time ago. Available evidence reveals two important characteristics. First, the process was dynamic. The rising share of self-expression values was associated with improving living standards and took off significantly once the post-WWI generations, which

did not experience the destruction and suffering of wars, became politically active. As the right-hand panel of Figure 5 shows, this process is still ongoing: the association between the increase in standards of living and the post-materialism index is visible in aggregated country-level surveys.





Note: Left panel: country level means values for the latest survey wave at the country level. Right panel: changes show absolute differences between the waves. Belarus is marked in red (latest survey in 2011). Sources: WVS (2015), version as of 18 April 2015; Penn World Table 9.1.

Second, the process had political implications. The post-WWII generations in Western Europe and the United States were unable to find institutions – parties and organisations – that would support and reflect their beliefs, so they promoted them using various forms of protest (Inglehart, 1971). What unites this process with the current protests in Belarus is the non-partisan and non-economic motivation of the protesters and the important role played by self-organisation. The protests do not happen because of a severe economic crisis; they bring together people from diverse backgrounds; they are not led by a single charismatic figure but feature multiple leaders within their own communities; and they do not support a particular class or party. But most importantly, the protesters do not demand money or power. Instead, they fight for immaterial goods: the ability to have a say in public decisions; the demand for government accountability for its actions; and fair political representation.

From this perspective, the protests in Belarus are a natural response to the rising living standards of the post-transition period. With economies contracting by about one-half of their pre-transition production volume, the problem which bothered the masses every day during the 1990s was the (in-)ability to support their families financially, not the opportunity to fulfil individual desires. Yet the subsequent recovery of the 2000s had its effect. With basic needs being met on a large scale, non-monetary values started to gain more importance. As Figure 4 shows, this effect is measurable and statistically significant. The average post-materialism index – a score which combines the answers to several questions that measure how strongly a respondent prefers non-material goods over material ones – registers a slow increase.⁴ This process follows a global pattern, and there is little reason to believe that it will reverse as long as the economy keeps growing (Inglehart, 2018).

⁴ The small magnitude of change should not lead to the conclusion that the effect is negligible. Social values change slowly: what is more important is whether the effect is statistically significant or not.

THE ROLE OF VALUES IN MODERN ECONOMIC GROWTH

As hypothesised by sociologists, the big shift from material to post-material values is likely to be connected to the structural change of the economy (Inglehart and Baker, 2000). With mass urbanisation and basic industrialisation over, the engine of economic growth switches from replication and mass production of non-sophisticated goods to deepening and expansion in the product space. The ability to create **new** goods and services and promote them on international markets becomes the key driver of economic growth (Hausmann and Hidalgo, 2011).

Creative economies, however, require creative people. Yet getting these people to become part of the economy is a hard task – the labour market for them is internationalised. This means that if Belarus wants to attract a highly qualified labour force, it will have to compete with the **best** enterprises the world has to offer. And as the practice of the largest IT enterprises shows, the environment and culture within these enterprises become an important factor in the career decisions of industry professionals. The reason is simple: no matter how big your salary, it cannot help you buy non-material goods such as fairness, quality of public services, space to fulfil professional ambitions and a non-discriminative social environment.

By protecting the highly suspicious presidential election results and disregarding the option to establish a peaceful dialogue with the protesters, Belarus's governing elites give a strong signal to the public that inclusive treatment is conditional on compliance with the current political status quo. There can be little doubt that such political decisions will not help to attract talented individuals with exit options on the international labour market.

It is unlikely that already established industries will massively reallocate their production capacities away from Belarus.⁵ The economy will have to pay, however, with forgone investments: the unutilised opportunities to establish modern industries and enter new markets with higher value added. The state-subsidised SME finance on which the current government apparently places great emphasis will not help to counterbalance this effect, because the scarcest resource for an enterprise that creates – not replicates – are human competences rather than money.

THE FINAL WORDS

The moment of political transition is a terrible time for making predictions. Too many factors – some of them of a fundamental nature – can change overnight and make a fool of a careful analyst. Nonetheless, the structure of the Belarusian economy and the long-term social trends are likely to remain unaffected by the ongoing political turbulence.

While elites continue to oppose the ongoing protests and the instability of the financial sector, they are just fighting mere symptoms of the fundamental changes in Belarusian society. Ironically, these changes are the consequence of economic growth brought about by elites that are currently opposing the change. Today's powerholders in Belarus fail to realise that what they are fighting against is not a coup. It is the natural demand of the population to live in an environment that values people and their ideas more than GDP per capita. In today's world, high income is not enough to make a state an attractive place to live in. A modern state is one that respects minority rights, secures freedom of thought and

⁵ Although large multinationals have started to consider it already (Rbc.ru, 2020b).

provides a thriving environment to create new ideas. The sooner the Belarusian elites realise this, the greater the chance to achieve it at a low cost.

REFERENCES

Adarov, A., Bornukova, K., Dobrinsky, R., Havlik, P., Hunya, G., Kruk, D. & Pindyuk, O. (2016). *The Belarus economy: the challenges of stalled reforms* (No. 413). wiiw Research Report.

Atasuntsev, A. & Himshiashvili, P. (2020). How did Minsk evaluate the first meeting of Putin and Lukashenko during the protests? [In Russian], Rbc.ru. Link: <u>https://archive.is/wip/efS0P</u>

Feenstra, R. C., Inklaar, R. & Timmer, M. P. (2015). The next generation of the Penn World Table. *American Economic Review*, *105*(10), 3150-82. Link: <u>https://www.rug.nl/ggdc/productivity/pwt/?lang=en</u>

Fitch (2020). Belarus Crisis Creates Risks to Macro, Financing Improvements. Link: <u>https://www.fitchratings.com/research/sovereigns/belarus-crisis-creates-risks-to-macro-financing-improvements-18-08-2020</u>

Hausmann, R. & Hidalgo, C. A. (2011). The network structure of economic output. *Journal of Economic Growth*, *16*(4), 309-342.

Inglehart, R. (1971). The silent revolution in Europe: Intergenerational change in post-industrial societies. *The American Political Science Review* (1971): 991-1017.

Inglehart, R. (1977). *The silent revolution: Changing values and political styles among Western publics*. Princeton University Press.

Inglehart, R. & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 19-51.

Inglehart, R. (2018). *Cultural evolution: people's motivations are changing and reshaping the world*. Cambridge University Press.

Inglehart, R. (2020). *Modernization and postmodernization: Cultural, economic, and political change in 43 societies*. Princeton University Press, 2020.

Koshkina, J. (2020). Belarusians withdrew \$1 billion from banks in August. [In Russian] Rbc.ru. Link: <u>https://archive.is/dsp8i</u>

Laeven, L. & Valencia, F. (2020). Systemic Banking Crises Database II. IMF Economic Review, 1-55.

Ministry of Finance of the Republic of Belarus (2020). Public Debt of the Republic of Belarus as of October 1, 2020. Press release. Link: <u>https://archive.is/wip/ycMr8</u>

National Bank of the Republic of Belarus [NBS] (2020a). Broad Money Supply. Link: https://www.nbrb.by/engl/statistics/monetarystat/broadmoney

National Bank of the Republic of Belarus [NBS] (2020b). As of 1 September 2020 the volume of gold and foreign exchange reserves of the Republic of Belarus amounted to USD 7.5 billion. Link: <u>https://archive.is/wip/JgLKn</u>

National Bank of the Republic of Belarus [NBS] (2020c). Interest rates on the interbank market. Link: <u>https://www.nbrb.by/engl/statistics/financialmarkets/interbankrates?Mode=month&IsSearch=true&Month=7&Y</u> <u>ear=2019</u>

Obstfeld, M., Rogoff, K. S. & Wren-Lewis, S. (1996). *Foundations of international macroeconomics* (Vol. 30). Cambridge, MA: MIT press.

22

Rbc.ru (2020a). Russia and Belarus will finalize talks on cancelling mobile roaming by the end of the year. [In Russian]. Link: <u>https://archive.is/wip/RS1rb</u>

Rbc.ru (2020b). Viber decided to close its office in Minsk after the visit of law enforcement officers to Yandex. [In Russian]. Link: <u>https://archive.is/wip/l8cLi</u>

Trenin, D. (2020). Game Over for Lukashenko: The Kremlin's Next Move. Link: https://archive.is/PwJOx

WVS (2015). Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2014. World Values Survey: All Rounds - Country-Pooled Datafile Version: <u>https://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp</u>. Madrid: JD Systems Institute.

Return of the progressive tax

BY BRANIMIR JOVANOVIC¹

The countries of Central, East and Southeast Europe (CESEE) have seen their public deficits and debts soar during the COVID-19 pandemic. In the post-COVID-19 world they will have to consolidate them. One way in which to do that is by restoring the progressive income tax, which will give governments the much-needed money without hurting their economies while also reducing inequality.

INTRODUCTION

Budget deficits in CESEE countries recorded sizeable increases during the COVID-19 pandemic (Figure 1). Rightly so, as governments had to spend to support their health systems and their economies in times when economic activity and government revenues were decimated.



Figure 1 / Increase in general government deficits in CESEE countries in 2020 compared with 2019 (percentage points of GDP)

But deficits of such magnitude cannot be sustained over long periods of time, at least not in these countries, which do not grow very fast and face non-zero borrowing costs. Therefore, CESEE countries should already start thinking about possible options for consolidating their public finances after the pandemic. Cutting public spending across the board should not be an option, as governments will still need to provide support to their fragile post-pandemic economies. Instead, CESEE governments should focus on increasing their revenues, and one of the ways to do this is by restoring the progressive income tax regime, which many of these countries abandoned some time ago.

¹ This article is based on a forthcoming wiw working paper *Flat Taxes, Bumpy Economies?*, by Branimir Jovanovic.

In this article we discuss the likely effects of the restoration of the progressive income tax regime in CESEE countries, focusing on several macroeconomic outcomes: government revenues, income inequality, informal economic activity, labour force participation, employment, investment, savings, household consumption and GDP growth.

THE FLAT TAX 'CRAZE'

An IMF working paper from 2006 states that '*[t]he last few years have seen widespread interest – not quite a revolution, but certainly something of a craze – in the "flat tax"* (Keen et al., 2006, p. 3).

At that time eight European countries, all from Central, East and Southeast Europe, had a flat-tax regime – Estonia, Lithuania, Latvia, Russia, Ukraine, Slovakia, Georgia and Romania. In the following years ten more countries would adopt it – North Macedonia, Montenegro, the Czech Republic, Bulgaria, Albania, Kazakhstan, Kyrgyzstan, Bosnia and Herzegovina, Belarus and Hungary. Meanwhile seven countries – Ukraine, the Czech Republic, Slovakia, Montenegro, Albania, Latvia and North Macedonia – would leave it, but Ukraine and North Macedonia decided to re-adopt it. The current number of countries with a flat-tax regime stands at 13 (Table 1).

Country	Year of introduction	Year of leaving
Estonia	1994	
Lithuania	1994	
Latvia	1997	2018
Russia	2001	
Slovakia	2004	2013
Ukraine	2004, 2016	2011
Georgia	2005	
Romania	2005	
North Macedonia	2007, 2020	2019
Montenegro	2007	2013
Czech Republic	2008	2013
Bulgaria	2008	
Albania	2008	2014
Kazakhstan	2008	
Kyrgyzstan	2009	
Belarus	2009	
Bosnia and Herzegovina	2009	
Hungary	2012	

Table 1 / Countries with a flat income tax regime

The main arguments in favour of the flat tax were that it would:

- > simplify the tax system, making it easier for companies to comply with it;
- reduce the incentives to under-report income, since the tax rate is the same, regardless of the level of income;
- > reduce the informal economy and hence increase government revenues;

- > stimulate labour market activity, since people will not be disincentivised from working more because of the higher tax rates that kick in after a certain level of income;
- > lead to higher consumption, since people will have higher net incomes;
- > lead to higher investment, as companies' profits will also increase if the lower tax is not fully transferred to the workers' net earnings;
- > increase foreign direct investment (FDI), as foreign companies prefer countries with lower tax rates;
- > increase savings in the economy, as people will have more money left; and
- > lead to higher GDP growth through all these channels.

But how has the flat tax behaved in reality - and has it lived up to its promises?

WHAT THE FLAT TAX REALLY BROUGHT

We assess whether the flat tax lived up to its promises using quasi-experimental, Difference-in-Differences econometric technique. This technique tries to mimic experimental design by comparing the differences in the outcome of interest between a treatment group and a control group after a certain treatment. The treatment in this case is the introduction of the flat tax, the treatment group are the CESEE countries that introduced a flat tax, and the control group are the CESEE countries that did not introduce a flat tax. The outcomes of interest that we analyse are: the shadow economy, labour force participation, employment, income inequality, budget revenues, national saving, household consumption, investment, FDI inflows and GDP growth.

Practically, the Difference-in-Differences technique is implemented by estimating panel regressions, where the outcomes of interest are the dependent variables and the flat tax is one of the explanatory variables, alongside all the other variables that may affect the outcome of interest. Table 2 presents the results of these regressions. The outcome of interest is shown in the heading row, and asterisks indicate statistically significant coefficients. For simplicity, just the variable for the flat tax is included, the others are omitted.

VARIABLES	(1) Informal economy	(2) Labour participation	(3) Employment	(4) Gini	(5) Income tax revenues	(6) Saving	(7) Household consumption	(8) Investment	(9) FDI	(10) GDP growth
Flat tax	-0.86 (0.13)	-0.43* (0.09)	0.41 (0.26)	0.66*** (0.00)	-0.45* (0.09)	0.79 (0.59)	-2.47** (0.04)	0.49 (0.56)	0.15 (0.88)	0.51 (0.52)
Number of observations	489	489	489	489	489	489	489	489	489	489
Number of countries	26	26	26	26	26	26	26	26	26	26

Table 2 / Results of the Difference-in-Differences regressions

Note: Explanatory variables not shown: Gini coefficient of income inequality, informal economy, income tax revenues, employment, labour force participation, household consumption, investment, net exports, national saving, FDI, GDP growth, constant, country-fixed effects, country specific trends.

*** indicated significance at 1%, ** significance at 5%, * significance at 10%.

Robust p values in parentheses.

As can be seen from column (1), the share of the informal economy has not been affected by the flat-tax regime, as the coefficient on the flat tax is insignificant in that regression. The same applies to employment, saving, investment, FDI and GDP growth – the flat tax has not had a statistically significant effect on any of these variables in the CESEE countries. On the other hand, it has had a significant effect on income inequality (Gini), government revenues, household consumption and labour force participation.

Income inequality, measured by the Gini coefficient, has increased on average by 0.66 percentage points after the introduction of the flat tax. This is to be expected – the flat tax has reduced the effective tax rates for higher-income individuals, increasing their income more than the income of others. Government revenues have declined after the flat tax introduction, on average by 0.45 percentage points of GDP. Again, this is to be expected, as the effective tax rates have been lowered but official economic activity has not increased. The effect is very sizeable when observed over a longer period of time – for a period of 20 years it is equal to forgone government revenues of 9% of GDP.

Household consumption, measured as a share of GDP, has declined by 2.47 percentage points on average after the flat tax introduction. This may be because the flat tax has redistributed net income towards the better-off individuals, who usually have a lower propensity to consume, or it could also be because the introduction of the flat tax has been accompanied by increases in indirect taxation, which has increased the prices of goods and reduced their consumption, primarily among lower-income individuals.

Labour force participation, measured as a share of the total population, has (perhaps surprisingly) actually declined after the flat tax introduction, by 0.4 percentage points on average. This can be explained by the income effect of the flat tax – it has increased net income for certain individuals, which might have led their family members to become inactive. Additionally, it may be explained by lower government revenues and the resultant lower spending on active labour market policies.

Overall, the prevailing evidence of the effects of the flat tax is that it has not reduced informal economic activity, has not led to higher FDI, investment and GDP growth, and has not increased labour market participation and employment. On the contrary, it has reduced government revenues, increased inequality, reduced household consumption and lowered labour force participation.

In other words, the flat tax 'craze' in CESEE countries failed to live up to its promises.

CHALLENGES OF THE POST-CORONA WORLD

The CESEE countries will inevitably have to face fiscal consolidation after the COVID-19 pandemic. Their current fiscal deficits of around 7% of GDP (on average), in a situation when they have non-zero borrowing costs, are simply unsustainable over the medium term. In theory, they could reduce their deficits if their economies were to grow at very high rates, but the growth rates we are currently projecting for these countries for the next few years, of around 4%, do not support this option.

There are many ways in which countries can reduce their fiscal deficits, but in essence they boil down to combinations of two measures – cutting spending and increasing revenues.

Cutting public spending in the post-COVID-19 world would be a very risky option, as it is likely to hurt economies that will remain very fragile for quite some time after the pandemic. Governments will have to maintain elevated levels of spending for some time to help heal the scars inflicted by the pandemic, in the healthcare, social and economic sphere.

Therefore, governments will soon have to start thinking about increasing their revenues, and this can be done in several ways. It can be done by raising tax collection via improving compliance, reducing the informal economy, improving international cooperation on tax matters etc. It can also be done by broadening the tax base through reducing tax exemptions and deductions, or alternatively by introducing new taxes, such as the tax on non-recycled plastic (proposed by the European Commission), a financial transactions tax or a wealth tax. Finally, it can also be done by increasing existing tax rates, especially for some groups of society.

The International Monetary Fund has already mentioned the option of increasing taxes in its October 2020 World Economic Outlook (IMF, 2020, p. xvii): '[G]overnments may need to consider raising progressive taxes on more affluent individuals and those relatively less affected by the crisis (including increasing tax rates on higher income brackets, high-end property, capital gains, and wealth) as well as changes to corporate taxation that ensure firms pay taxes commensurate with profitability.'

History teaches us that major crises have usually been followed by more progressive taxes. For instance, the highest marginal personal income tax rate in the UK was raised to 60% after the First World War, from 8% before the war. It was lowered afterwards to 50% but then increased once more after the Great Depression, to 66%. After the Second World War it was raised to 98% (Figure 2) and remained at levels of around 90% until the end of the 1970s. The UK is no exception – trends have been similar in the US, France, Germany and many other developed countries.





Source: piketty.pse.ens.fr/capital21c.

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Recently, certain countries have also taken action in this direction. Russia has announced that it will restore the progressive personal income tax rate from 2021, after 20 years of a flat-tax regime. The proposed change is very small – an additional rate of 15% will be introduced for annual incomes above RUB 5 million (ca. EUR 55,000), which is only a marginal increase on the current rate of 13%. But it is a significant symbolic move, considering that the biggest CESEE country with a flat-tax regime and also one of the earliest adopters with sizeable revenues from natural resources is deciding to leave the regime during the current crisis and to return to a progressive tax. The UK is also considering making some of its taxes more progressive, but there are as yet no official details on the proposal available.

CONCLUSION

One of the many legacies, if not scars, left behind by the COVID-19 pandemic is that governments will have to find ways to consolidate their finances in the years to come. It would be undesirable to do that through cutting public spending, as this would hurt the still fragile economies and societies. Governments should thus try to find ways to improve their revenues without causing too much harm to their economies. In the CESEE countries with flat-tax regimes, restoring the progressive tax seems to be one obvious option. Evidence suggests that this is likely to increase government revenues and improve economic equality without any harmful economic effects.

REFERENCES

Keen, Michael, Kim Yitae and Ricardo Varsano (2006), *The 'Flat Tax(es)': Principles and Evidence*, IMF Working Paper 06/218.

IMF (2020), World Economic Outlook, October 2020: A Long and Difficult Ascent.

Monthly and quarterly statistics for Central, East and Southeast Europe

The monthly and quarterly statistics cover **22 countries** of the CESEE region. The graphical form of presenting statistical data is intended to facilitate the **analysis of short-term macroeconomic developments**. The set of indicators captures trends in the real and monetary sectors of the economy, in the labour market, as well as in the financial and external sectors.

Baseline data and a variety of other monthly and quarterly statistics, **country-specific** definitions of indicators and **methodological information** on particular time series are **available in the wiiw Monthly Database** under: <u>https://data.wiiw.ac.at/monthly-database.html</u>. Users regularly interested in a certain set of indicators may create a personalised query which can then be quickly downloaded for updates each month.

Conventional signs and abbreviations used

per cent
exchange rate
Gross Domestic Product
Harmonized Index of Consumer Prices (for new EU Member States)
Labour Force Survey
Non-profit institutions serving households
per annum
Producer Price Index
registered

The following national currencies are used:

Albanian lek	HRK	Croatian kuna	RON	Romanian leu
Bosnian convertible mark	HUF	Hungarian forint	RSD	Serbian dinar
Bulgarian lev	KZT	Kazakh tenge	RUB	Russian rouble
Belarusian rouble	MKD	Macedonian denar	TRY	Turkish lira
Czech koruna	PLN	Polish zloty	UAH	Ukrainian hryvnia
	Albanian lek Bosnian convertible mark Bulgarian lev Belarusian rouble Czech koruna	Albanian lekHRKBosnian convertible markHUFBulgarian levKZTBelarusian roubleMKDCzech korunaPLN	Albanian lekHRKCroatian kunaBosnian convertible markHUFHungarian forintBulgarian levKZTKazakh tengeBelarusian roubleMKDMacedonian denarCzech korunaPLNPolish zloty	Albanian lekHRKCroatian kunaRONBosnian convertible markHUFHungarian forintRSDBulgarian levKZTKazakh tengeRUBBelarusian roubleMKDMacedonian denarTRYCzech korunaPLNPolish zlotyUAH

EUR euro – national currency for Montenegro, Kosovo and for the euro-area countries Estonia (from January 2011, euro-fixed before), Latvia (from January 2014, euro-fixed before), Lithuania (from January 2015, euro-fixed before), Slovakia (from January 2009, euro-fixed before) and Slovenia (from January 2007, euro-fixed before).

Sources of statistical data: Eurostat, National Statistical Offices, Central Banks and Public Employment Services; wiiw estimates.

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Monthly Report 2020/11 wiiw

Albania



Unit labour costs in industry annual growth rate in %



3Q 18 4Q 18 1Q 19 2Q 19 3Q 19 4Q 19 1Q 20 2Q 20 3Q 20







Inflation and policy rate

Consumer prices (HICP), annual growth



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

Belarus







Inflation and policy rate





*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Bosnia and Herzegovina



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Bulgaria









Inflation and policy rate



6

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External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Monthly Report 2020/11 wiiw

Croatia













Inflation and policy rate



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

Czech Republic









Inflation and policy rate



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Monthly Report 2020/11 wiiw

%

8

7

6

5 4

3

2

1

0

Sep-20

Estonia













Real sector development

in %

Employed persons (LFS)

Unemployment rate (LFS)

Sep-19

Mar-20

Industry, 3-month moving average

Left scale:

Right scale:

Mar-19

annual

growth

10

5

0

-5

-10

-15

-20

Sep-18



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

Hungary









Inflation and policy rate $\frac{1}{10\%}$

Consumer prices (HICP), annual growth



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Kazakhstan



Unit labour costs in industry









Inflation and policy rate



External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

Kosovo



*EUR based.

Monthly Report 2020/11 wiiw

Latvia







3Q 18 4Q 18 1Q 19 2Q 19 3Q 19 4Q 19 1Q 20 2Q 20 3Q 20





Inflation and policy rate



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

Lithuania





Financial indicators in % Left scale: Loans to non-financial corporations Loans to households Right scale: annual Non-performing loans growth in % of total 10 3.5 3.0 5 2.5 0 2.0 1.5 -5 1.0 -10 0.5 0.0 -15 Jan-18 Jul-18 Jan-19 Jul-19 Jan-20 Jul-20







External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Montenegro



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

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North Macedonia









Inflation and policy rate



External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Monthly Report 2020/11 wiiw

Poland







3Q 18 4Q 18 1Q 19 2Q 19 3Q 19 4Q 19 1Q 20 2Q 20 3Q 20





Inflation and policy rate



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

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Romania



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

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Russia



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

Serbia









Inflation and policy rate



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Monthly Report 2020/11 wiiw

Slovakia



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

Slovenia







Inflation and policy rate



% of GDP

9

8

7

6

5

4

3

2

1

0

Sep-20



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Monthly Report 2020/11 wiiw

Turkey



Unit labour costs in industry annual growth rate in %



3Q 18 4Q 18 1Q 19 2Q 19 3Q 19 4Q 19 1Q 20 2Q 20 3Q 20





Inflation and policy rate



External sector development in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics. Baseline data, country-specific definitions and methodological breaks in time series are available under: <u>https://data.wiiw.ac.at/monthly-database.html</u>

Ukraine

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*Positive values of the productivity component on the graph reflect decline in productivity and vice versa. **EUR based.

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