

# A comparative analysis of the results of financial liberalization in Central European countries: 1991-2020

Usman Ghani & Md Kamal Hossain

## Abstract

This article builds understanding upon the financial liberalization as financial intervention that influences upon the monetary fiscal, corporate factors of overall economic policy setups. Based on considerations for financial liberalization in Central European countries for the period of 1991-2020, this article discusses the impact of financial liberalization for the countries of central Europe which includes Austria, Bulgaria, Czech Republic, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia, Slovakia, (referred hereafter as CECs). The main aim of this study is to explain the impact of financial liberalization on financial portfolios based upon the discussion of financial liberalization in Central European region taking in account several financial liberalization and integration measures for the period of 1991-2020 with many evident global financial trends and indexes. Capital inflows, successful reforms in the banking sector, financial sector leniency for cash inflows, financial regulation and the impacts of these measures (as a result of financial liberalization) upon the overall economic development are vital auras of the discussion in this paper. These impressions are supported by the descriptive data from financial databases regarding measures of financial liberalization.



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## Introduction

Financial liberalization has been understood as a strong financial intervention that influences upon the monetary fiscal, corporate factors of overall economic policy setups. Clearly, far reaching effects of financial liberalization also makes the way up to financial and non-financial assets considerations towards economic growth. Financial liberalization being a valuable tool in economic transformation as literature emphasized it as a measure of lessening governmental control over financing, capitals, interest rates and innovating the financial instruments to achieve globalization of financial sectors merely by the involvement of private sectors and entities. Such innovations as discussed in the course material include private pension funds and other institutional investors as a source of long-term investments in the financial capital and real markets, articulating inputs in social security systems. The financial sector is also discussed based on banking systems and reforms.

Considering the economic policy as a base of financial policies, we can further understand monetary and fiscal policies. In former, the management of interest rate in money flow matters is dealt with. Financial institutions as central banks use this policy at national level to control these indicators to boost economic development and is controlled by the central financial institutions to encourage the investments in economic activities. The fiscal policy in the general terms is governmental control over tax and payments to boost economic activity with a direct impact over real economy. As we build understanding towards the financial terms, there would be detailed study over these as this study progresses. Introduction gives brief idea of the financial liberalization and regional considerations in this article. In literature review, the financial liberalization is discussed with relationship in other financial definitions. Subsequently, banking sector, capital account liberalization and other impacts are discussed based on the statistics in literature, data sources and financial growth statistics. Discussion and analysis section present some extended exercise for Central European countries in the subjected period of time.

Analysis of literature and reviewed statistics revealed that as EU has continued its external liberalization process in early 1990s. Accessions of new members have made it diverse financially, but CECs fortunately maintains the EU financial trends and show promising growth with some exceptions in this regard. EU used structured financial changes successfully to control and liberalize the capital flows. As a result, CECs show a better financial growth trend followed by financial liberalization of the capital account. It has been largely believed that the financial liberalization shall be helping the capital flows overall. Subsequently, this will enrich the developing economies by increased involvement and access to the global capital markets. But it was not the case overall, as the literature analyses shows the greater share of the pie in the net investment value for the established economies and the emerging economies struggled in global discussions. The more beneficial effects were on the developed markets and economies and the quality of financial institutions that commended the financial liberalization also stood beneficial for the Euro region. It could not be that helpful for all the overall effects due to debts mismanagement.<sup>1</sup> But that was merely deviated in the case in CECs as compared to the rest of the economies in the world due to regional support and policies of financial institutions.

## Literature Review

The proposal of financial liberalization is essentially useful for the economic development as its resultant openness generates a competitive financial market. The basic argument in

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<sup>1</sup> Broner, F. A., & Ventura, J. (2010). Rethinking the effects of financial liberalization (No. w16640). National Bureau of Economic Research.

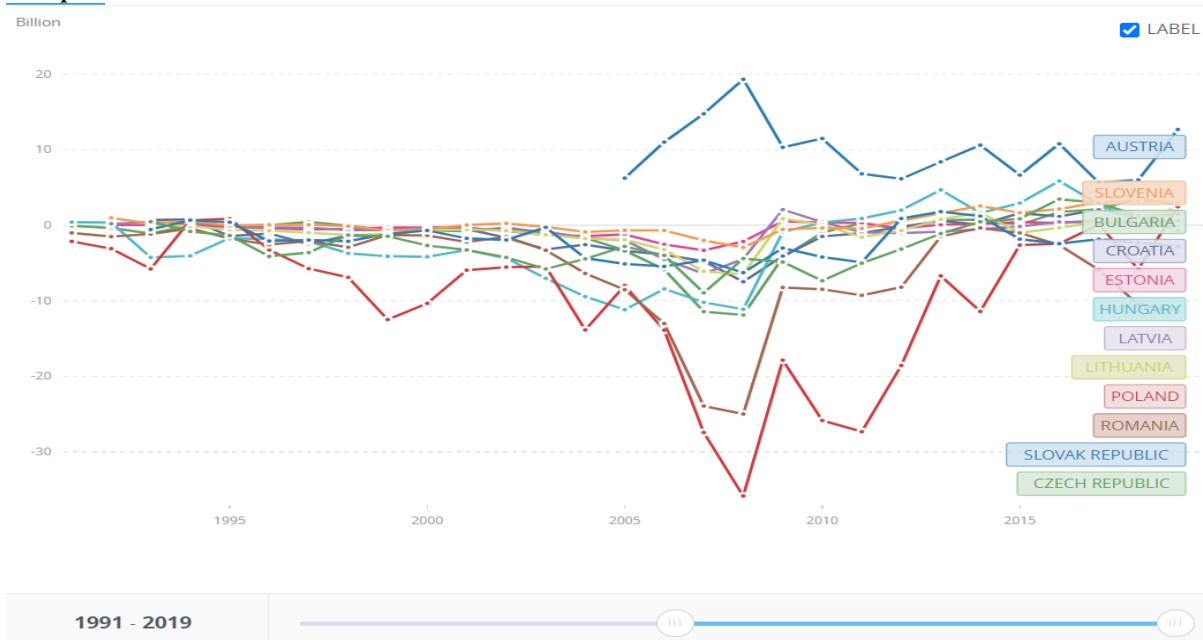
literature presumes that financial openness and liberalization would create an effective globalized financial market, based on long term assets and higher return rates cultivating economic up-and-coming. Measures of financial liberalization as indicated in IMF working paper by Detragiache et al. (2008) present a long-term analysis of more than 90 economies since last quarter of the past century and presents the overall analyses of financial reforms throughout this period of time and records that Bank Regulations, Interest Rate Controls, Credit Controls, Securities Market, Privatization, Entry Barriers, Capital Account are important measures of financial openness. As Abiad and Mody (2005) states that literature does not consider the Securities Market as an important measure of financial reforms before the crisis period that Williamson and Mahar (1998) primarily introduce as a restriction in financial operations (as cited in Detragiache et al. (2008)). Bandiera et al. (2000) and Laeven (2003) datasets have been extended in Detragiache et al. (2008) to illustrate the financial liberalization across seven dimensions as stated above. Also, role of the financial sector in economic development is recognized. With the growth of financial sector many macroeconomic factors show a positive impact. Further research is needed to recommend what needs for financial development and how financial efficiency is improved. For that, Detragiache et al. (2008) emphasized the financial liberalization as a good research intervention also in terms of macroeconomic factors and financial policy make ups. Fratzscher & Bussiere (2004) stated the fact that debate upon financial liberalization got revived after the 90s financial crisis. Literature presents an unclear theory upon the relation of financial openness with economic growth. Also, relationship among financial openness, economic development, and the consequential economic outcomes. The credit provision seems to be a most necessary element for financial liberalization to be effective and beneficial. Furthermore, Fratzscher & Bussiere (2004) argue over short term benefits of the financial liberalization and long-term challenges. Domestic financial and equity market liberalization also got significant importance in overall global financial openness to benefit with growth. McKinnon and Pill (1997, 1999) also argue over the long-term financial instability and lower growth as caused by the short-term liberalization caused lending and investment peaks. On the other hand, Gourinchas and Jeanne (2002) sees the investment and domestic savings lock in as a long-term gain through these reforms (as cited in Fratzscher & Bussiere (2004)). Upon such a tradeoff relationship, Fratzscher & Bussiere (2004) reported slight growth in the early years of reforms in 45 emerging economies including Hungary, Latvia, Lithuania, Romania, Poland, Slovakia and Slovenia along with some other OECD countries and then gradually a declining trend in growth, in the long term. Literature discusses the financial liberalization as a beneficial measure in financial markets openness at global and domestic level. Financial liberalization has encouraged investments and benefits the economic development, as early literature in 1970s examines the benefits of liberalized financial sector. Global crisis in 2008 emphasized the need for reconsideration of anomalies in financial markets and need of financial liberalization.

### **Banking Sector**

In the European Union region, ECB (European Central Bank) and the alignment of fiscal policy measures actualized by maximum EU nations played a central part turning 2008 recession into opportunity. Literature emphasis upon the major concern of how active and sustainable economic policy procedures resulted in workable policy and regulation for the banking sector. The neoclassical school of thought and standard economic matters overlooked the significance of financial and the banking sector in financial movement before the transition period. In 1990s, the successful economic transition in CECs and CEECs induced the capital, privatizations, investments and other banking sector reforms and developments. GDP is discussed as a macro economic indicator that promises with the increased productivity of the banking sector as a major financial setup in Euro zone.

Overview of financial sector development is discussed as in importance of the savings and more in the banking sector development than in the market based financial systems. But also, it is evident as Levine (2000) states that the financial growth does not depend upon the dominance of the financial system whether it is market or bank dominant (as cited in Wagner & Iakova, 2001). Both systems are vital being branching out and sharing financial risk. What matters in this regard is the financial regulation, as an effective measure of supervision. CECs had a lag in private sector's bank shares in 90s i.e., below (50 percent) as compared to the typical 60 percent in good performing economies, but Hungary, Poland and Slovenia showed a promising trend in increasing private credit. Also, Imbalance of deposits and credits is observed. Non-performing loans in the Slovakia and Czech Republic needed significant control over these. Moreover, the internet banking initiatives started in the CECs around 2000 and the bond market started flourishing alongside a very little share of pension and equity markets in the overall financial growth and GDP share.

In the beginning of the new century the EU started FDI liberalizations as a start in openness measures in the banking sector and financial frameworks. Many Western European banks invested in the CECs banking sector to occupy a great share in the banking industry in central region, as a result of these liberalization measures. Credit streams from developed economies demonstrated a key channel for making liquidity, the quick development of credit action and deposit developments in these nations was a key component in accelerating their rates of economic development. In the period of 2001 to 2004, trade and financial liberalization went hand in hand and the emerging markets grow at a faster rate in competition to the developed ones. Out of 20 fastest-developing countries, half of them were emerging economies in the mentioned period as a positive impact of financial liberalization around the globe. Therefore, majority of those economics confronted strongly increasing current account shortages (*Figure 1*). It is often a critical inclusion towards how financial liberalization and economic development associated.



**Figure 1. Current account balance (BoP, current US\$)<sup>2</sup> – CECs**

<sup>2</sup> <https://data.worldbank.org/indicator/BN.CAB.XOKA.CD?end=2019&locations=AT-BG-HR-EE-HU-LV-LT-PL-RO-SI-SK-CZ&start=1990>

(Source: World Bank)

So, we need to discuss the most inducing and prime fragment of most CECs economies as the banking sector. Andries and Capraru (2013) discusses the banking sector performance in perspective of financial liberalization and analyses, the impacts in period of 2004-2008 and explicitly mention that the banking sector reforms and other liberalization measure increase the cost efficiency. But making this count to the productivity growth needs the regulatory framework with the liberalization measures. Furthermore, profitability, inward funds, the quality of services and financial safety are indicated as good measures of banking efficiency. The Eurozone banking industry in 2010 faced the sovereign debt crisis, began with Greece, proceeded to Spain, Portugal, Italy and Ireland. Moreover, in France and Germany, banking industry were affected primarily due to US loans market in 2002-2008 and somewhat from the loan crisis. Therefore, add up to center credit to the nonbanking segment within the EU dropped 4.2%, which was \$32.13 trillion in 2010 dropped to \$30.78 trillion by 2017. Poland, the biggest Central European nation, saw credit movement lessen altogether in 2014 and 2015 due to these changes in credit action in Eurozone nations (Figure 2). Raise in credit movement has been observed in the banking industry of Poland by more than quadrupled within the period of 2005 to 2010 (from \$131 billion to \$614 billion). However, the sum in 2017 was fair \$765 billion, an unassuming increment compared to 2005–2010.

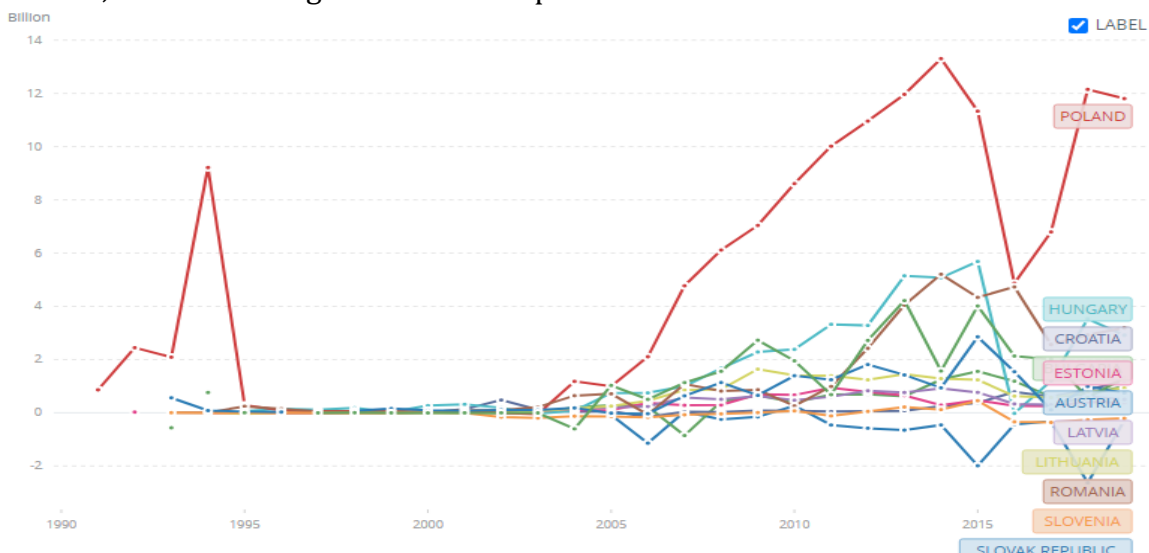


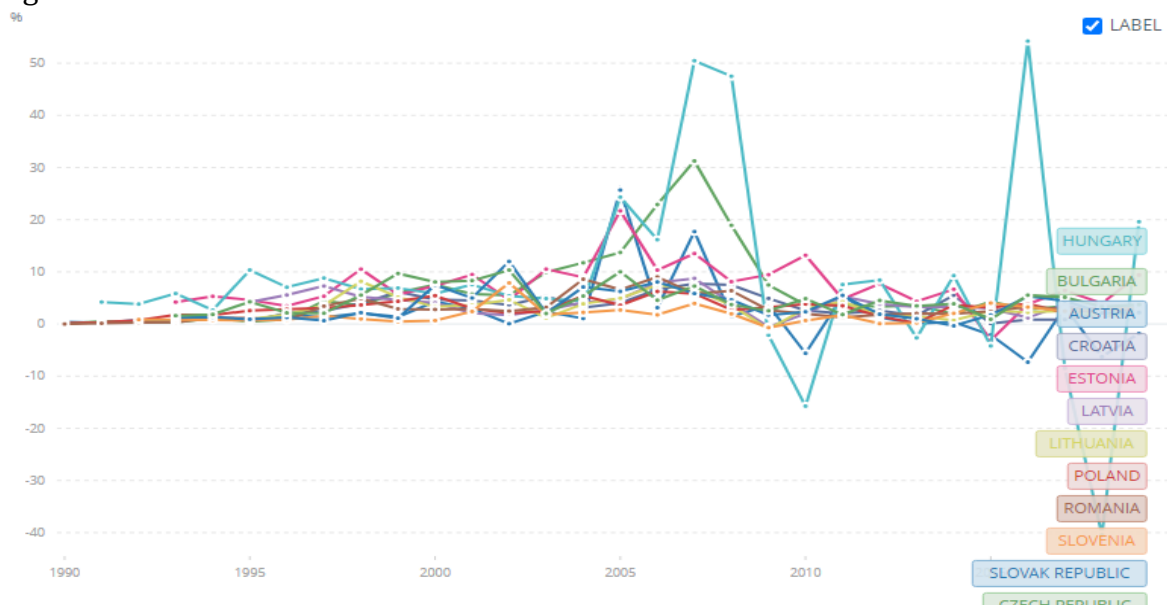
Figure 2. Net Capital Account, (BoP, current US\$)<sup>3</sup> - CECs

### Economic development and FDI

The industrialization is also important to GDP growth and for that financial sector and conditions are needed to be promising and advanced. Svilokos et al. (2019) states that 2008 financial crisis changed the perspective of industrialization as linked with the financial development. Now the industrialization is seen as important to boost the financial and overall development and growth in GDP (p. 385). Czech Republic and Poland has stopped the trend of pre-crisis deindustrialization after 2008 as deindustrialization triggered the restructuring of resources to services sector as in the case of Croatia. Indecisive evidences are present in literature as in Gourinchas & Jeanne (2006), over the link of financial liberalization with industrialization. In the development of financial sector, CEC's, has a big footprint in banking sector reforms. With the liberalization measure the foreign banks made the local industry competitive and growing. Deindustrialization is seen as negative if services sector fails to

<sup>3</sup> <https://data.worldbank.org/indicator/BN.TRF.KOGT.CD?end=2019&locations=AT-BG-HR-EE-HU-LV-LT-PL-RO-SI-SK-CZ&start=1990>

engage the resources from manufacturing to cause the equal or high level of growth as that from manufacturing sector, as Alderson (1999) argues (as cited in Svilokos et al., 2019). Also, industrialization is being challenging to take part in overall financial growth as in the past. New industrial policies also demanded for the financial openness to welcome investments and privatization. BRIC also emphasized the EU financial, industrial and environmental policies rethinking. Exchange facilities and liquidity amenities were also highlighted in literature emphasizing the financial liberalization towards the economic growth, as another study by Svilokos in 2007 indicated. Reindustrialization has been emphasized in the EU after crisis rethinking the industrialization policies also in CECs as pure dependance on financial development has prone the CECs to crisis generating economic bubbles. Svilokos et al. (2019) studied GDP as a function of real interest rate, FDI, financial openness and observed the significance of REER and trade terms financial openness have been vital for the period of 2005-15 for CECs and GDP share in industrialization for subjected countries is more than the EU average.



**Figure 3. FDI, net inflows (% of GDP)<sup>4</sup> - CECs**  
(Source: World Bank)

Followed by the accession of most CECs in 2004, including Hungary, Poland, Czech Republic, Slovakia become the investment<sup>5</sup> attractions in due course of time, mostly in manufacturing industry. Slovakia, Czech Republic and Hungary increased FDI in automobile industry as a part of reindustrialization initiatives (manufacturing). Most of the exports indicated by these countries are by foreign owned firms as Figure 3 indicates increased net inflows as %age of GDP since start of early 90s with exceptional rise in 2004 (net inflows of EU FDI increased from 17% to 31% of GDP in 2004) until 2008. Hungary recently regaining the rise in FDI net investment inflows (Figure 11, Appendix 1). Austria leading in FDI stocks above OECD average. (Figure 12, Appendix 1).

### Financial Liberalization, Capital Account and Other Financial Portfolios

In early 90s, in literature considerations about the global crisis Milesi-Ferrettiet al. indicated that increase in the international regulatory measures as Basel III, Dodd-Frank Act in US and

<sup>4</sup> <https://data.worldbank.org/indicator/BN.KLT.DINV.CD?end=2019&locations=AT-BG-HR-EE-HU-LV-LT-PL-RO-SI-SK-CZ&start=1990>

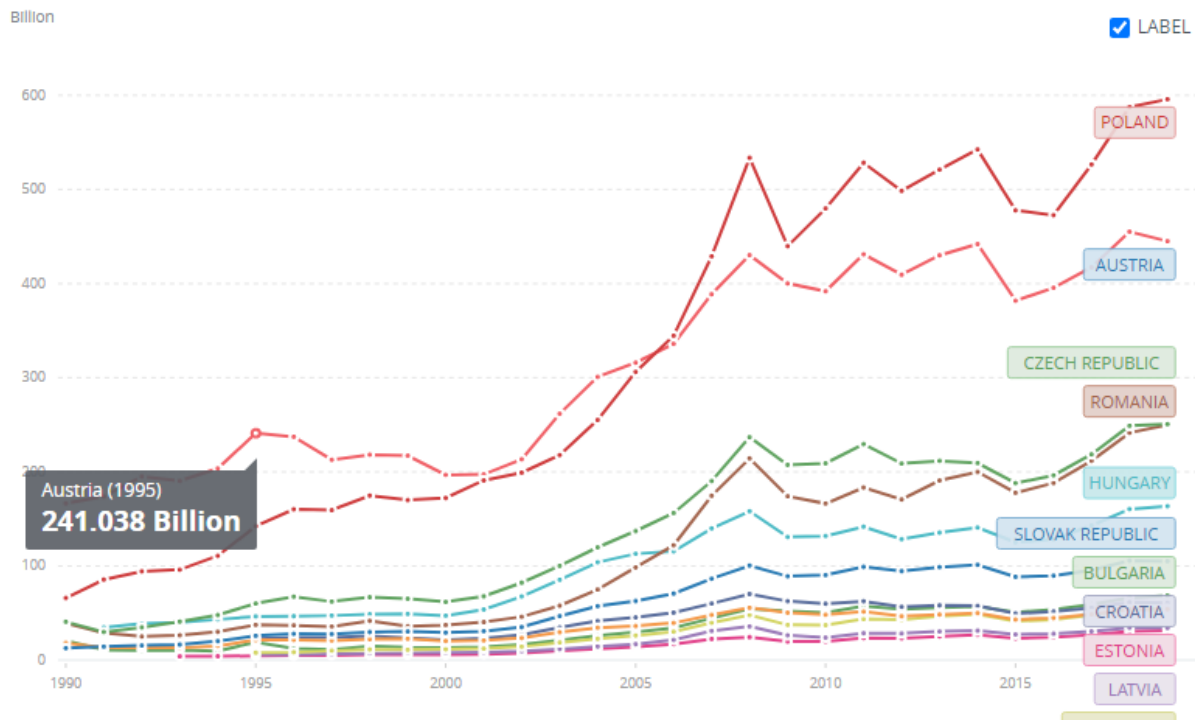
<sup>5</sup> Ernst & Young's 2005 European Attractiveness Survey

CRD IV in EU have caused the reforms across the banking activity, and additionally, a boost in bonds and stocks (Figure 12) is observed in the international market (as cited in Čaušević, F., 2019). Literature has largely based the starting arguments in his book for explanations about the financial liberalizations upon the Martin Feldstein and Charles Horioka findings in in which they have indicated a very similar trend and link among the national saving and national investment as opposed to neoliberalism theory because of the after-tax returns effect. NIIP (Net International Investment Position) as measured in terms of a balance and adjustment between external assets and liabilities, is analyzed in the literature as the measure of financial liberalization. There is also an indication that financial liberalization effects are primarily based upon the institutional qualities and financial stability that favor more to the developed economies as compared to the developing ones. Obuljen Zoričić et al. (2020) In European consideration, the accession to EU for newly member countries pass on over financial openness. Before 2008, this increased the credit activity and increased the exchange rate caused the current account depreciation (Figure 1), merely due to the spending of banking created credit onto imports that was suppressed in crisis. Here it is discussed in detailed if this perceived phenomenon has some links with the financial openness. The estimation model results in the negative correlation between financial openness. On the other hand, the current account balance is positively impacted with the financial crisis, but for short tenure. In the period of 1999-2016, Obuljen Zoričić et al. (2020) briefly discusses the current account balance as affected by the financial crisis, openness and interplay of exchange rate in this regard using Time Series Analysis Techniques and PMG regression methods as considered in Pesaran et al. (1999). In both the emerging euro economies and developed ones, investments from the private sector cause current account imbalances as Wyplosz (2013) indicated the swift credit growth in the housing market, indicating it as a bubble caused crisis, more than depreciating savings. Also, in the Euro zone, no considerable evidence of exchange rate impacts is observed about the current account balance.

On the other hand (Schnabl, 2018) discusses the conflicting fiscal policy impacts on current account disparities in view of monetary unification and expansion. In figure 1, most of the CECs show a negative Current account balance in the recession period and recovering gradually over the period of time gradually. Austria shows surplus current account balance 20 bn. USD with Estonia as the most deficit facing country. Romania and Slovak Republic showing recent deficit standings. Figure 2 shows the Net Capital Account standings of Poland as the country with most income 12 Bn. USD, Hungary at the second place with some downward peaks in case of Slovakia and Slovenia in recent decade. Most of the CEC members show rising trend in Net Capital Account with increased income in terms of FDI and portfolio investments.

The current account balance for Bulgaria counted as least-25.55 percent, opposite to that, highest for 7.90 percent. The Real Effective Exchange Rate varied from 51.40 to 111.56 in Slovakia in later 90s and Romania for 2007, respectively. Financial openness index also goes up from -1.26 to 2.36 in 2002 to 2007 with the overall value of 1.42 (Figure 10 & 11). A decline is evident in financial indices in terms of imports and GDP with positive impacts on current account balance during the financial crisis in CECs (Figure 1). The subjected countries catch upon successfully with the European region as a whole in financial openness terms. Weakening of current account is observed in the crisis because of domestic current account balance growth and economic buildup. Obuljen Zoričić et al. (2020) also proposed the importance and need of financial preventive frameworks to support the financial openness, exchange rates and current account accumulations in these countries. Čaušević, F. (2017) presents that Capital Account openness went in conjunction with key motivations to FDI, for export-driven ventures FDI is a main source of capital raising. USA and UK are the most financially advanced economies and

net importers of capital, together with Western part of Europe and Scandinavia (the EU 15) has experience the growing financial streams during first fourteen-years of twenty century. Unlikely, to their comparative financial condition. If we discuss CECs, all the countries show a positive GDP growth trend, Poland leading with around 600 billion USD and Lithuania and Latvia with least (less than 50 billion USD). Poland, Austria, Hungary, Slovakia, Slovenia and Bulgaria show a relatively good increasing GDP trend through the period of 1991 to 2020 than that of countries with a steeper trend i.e., Croatia, Estonia, Latvia and Lithuania (Figure 4). Also, CECs show a good percentage GDP growth on annually through the last half of this decade.



**Figure 4. GDP (current US\$) <sup>6</sup>- CECs**  
(Source: World Bank)

Increased international financial flows and relative economic growth in the developed economies makes a negative relationship between these in the period 2001 to 2015. The financial flows indicated mainly into the financial derivatives and interbank markets rather than the investments in the manufacturing and industrialization. But in the CECs growth coefficients are positive except for Austria, but the absolute GDP is best for Austria among CECs. This trend is explained in the Discussion and analysis part.

### Methodology

This paper workouts several financial liberalization indexes based upon the multiple financial portfolios to measure and compare the economies upon the financial openness. For this purpose, there has been an extensive combination of financial liberalization have been compared and presented. This paper thus takes the Chin Ito Index of financial openness (KAOPEN) measures the countries capital account openness. It considers another index KANEW as an overall liberalization index that takes account of capital inflows with respect to the yearly restrictions in economies. It includes capital outflows, financial market liberalizations (in terms of equity, bonds, money market, collective investment and derivatives), resident and non-resident liberalization into overall indexing.

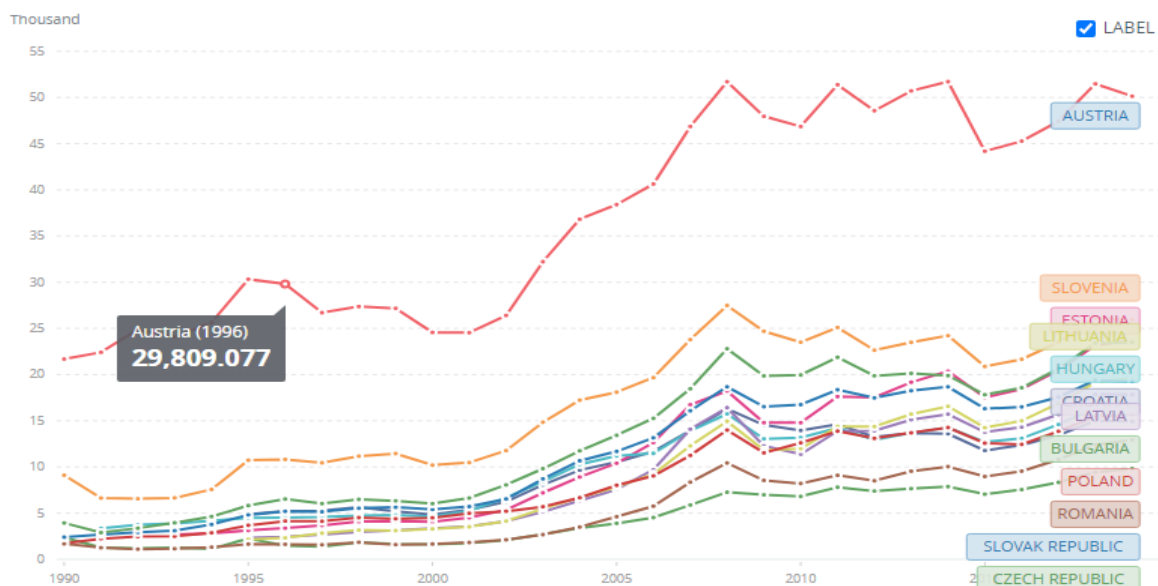
<sup>6</sup> <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?end=2019&locations=AT-BG-HR-EE-HU-LV-LT-PL-RO-SI-SK-CZ&start=1990>



Additionally measure of growth coefficients based upon Martin Feldstein and Charles Horioka findings and NIIP (Net International Investment Position) as measured in terms of a balance and adjustment between external assets and liabilities (as cited in Čaušević, F. (2017)), are analysed as the measure of financial liberalization in CECs’.

### Discussion and Analysis

To build a comparative analysis of most liberalized economies, Čaušević, F. (2019) presents the twenty top financially open world economies in terms of CFO as coefficient of financial openness: calculated as the proportion of share in global financial stock to that GDP share of the world and 20 countries with the highest proportions of financial stock per capita in terms of CFC i.e., coefficient of financial concentration: calculated as the ratio of global financial stock share and world population share. In financial openness terms, Austria listed among the top twenty financially liberalized countries in the world with CFO 1.54 and CFC 7.09. Several western and Eastern European countries as Luxembourg, Netherlands, Ireland, Belgium, France, Switzerland and Germany are among the most liberalized economies in 2005. Also, the year 2005 checked a “crisis” in modern financial history in terms of foreign trade. In 2000, the developing nations Sapprehended more in foreign exchange reserves than the developed nations, based on IMF data.<sup>7</sup>



**Figure 5. GDP per capita (current US\$)<sup>8</sup> – CECs**  
(Source: World Bank)

It is worth discussing that the quickest developing economies post crisis. Most surprisingly, India, whose GDP per capita 99.3%, whereas Indonesia, Poland, and Turkey expanded overall output per capita by 62.3%, 59%, and 53.7%, separately. Poland, Czech Republic and Hungary has experience GDP per capita development of 30.2%, 26.5% and 19.3% were among the best twenty quickest growing economies, respectively (Figure 5).

Literature presents several financial liberalization indexes based upon the multiple financial portfolios to measure and compare the economies upon the financial openness. Chin Ito Index of financial openness (KAOPEN) measures the countries openness of capital account. The measurements and tabulations in terms of the cross-country financial activities with detailed

<sup>7</sup> <https://www.imf.org/external/datamapper/profile/EUQ>

<sup>8</sup> <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?end=2019&locations=AT-BG-HR-EE-HU-LV-LT-PL-RO-SI-SK-CZ&start=1990>

in IMF's Annual Report on Exchange Arrangements and Exchange Restrictions, initially introduced in 2006. Figure 6 is based upon the graphical view of KAPOEN to compare the CECs graphically in terms of this index in the reported period. The graph is in normalized values between 3, -3 as in the referenced dataset. Jahan and Wang, in an IMF working paper contains a novel set of data about capital account openness index that studies over 168 countries in the period 1996-2013, IMF's Annual Report on Exchange Rate Arrangements and Restrictions (AREAER). KANEW is an overall liberalization index which includes capital inflows with respect to the yearly restrictions in economies. It includes capital outflows, financial market liberalizations (in terms of equity, bonds, money market, collective investment and derivatives), resident and non-resident liberalization into overall indexing.

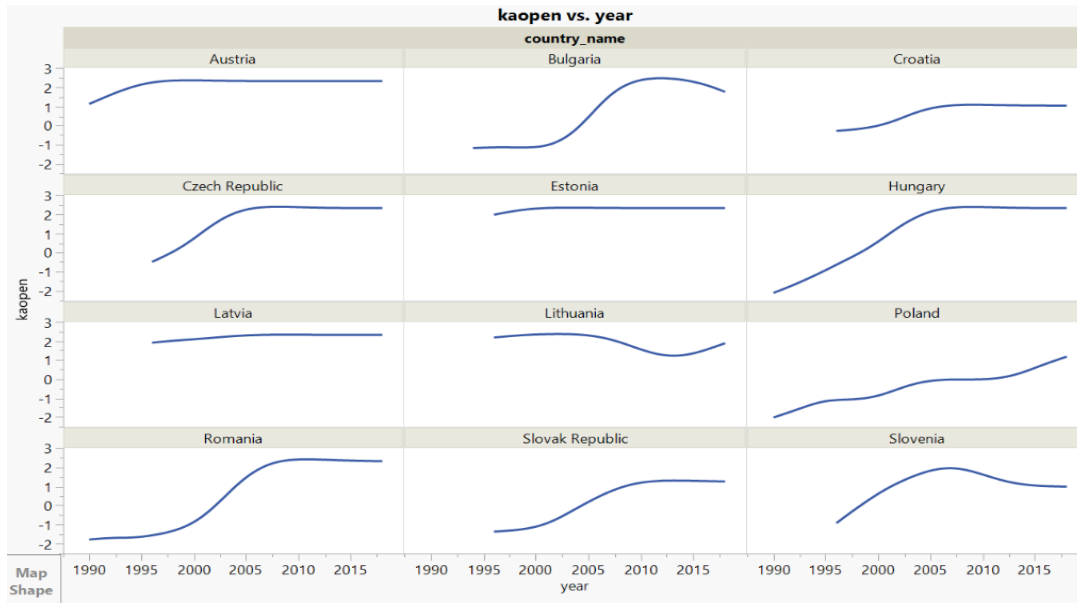


Figure 6. Chin-Ito Financial Openness Index (kaOpen), Compared

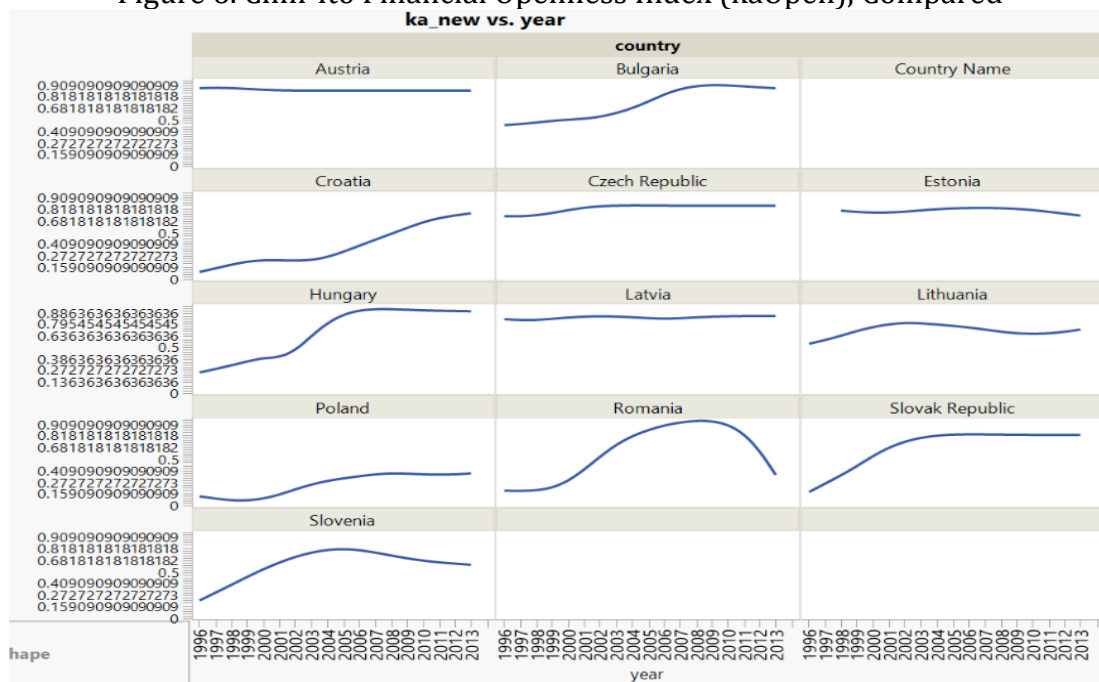


Figure 7. Financial Openness Index KaNew<sup>9</sup>, Compared

<sup>9</sup> Kanew, based on new data set of capital account openness index covering 168 countries during 1996-2013, described in detail in Jahan and Wang (forthcoming). <https://www.imf.org/Publications/wpica2019194-print.pdf>

Figure 7 presents the graphical representation of KANEW upon CECs and shows the similar trends with that of Chin -Ito Index with some exceptions. Lithuania, Slovenia and Romania show a declining trend in indexes after 2010 possibly due to out of the way national financial restrictions. Correspondingly, Obuljen Zoričić et al. (2020) considered Chin-Ito Financial Openness Index as a representation of financial liberalization (capital account openness) (Figure 6 reproduced by referenced data for CECs in JMP statistical graph builder tool). (Figure 6, 7).

Country Name	Share of country in World population (in %) 2000	Share of country in World population (in %) 2019	Share of country in World GDP (in %) 2000	Share of country in World GDP (in %) 2019	Growth Coefficient Cg 2000	Growth Coefficient Cg 2019
Austria	0.131029282	0.115684208	0.58538929	0.508925161	4.467622	4.399262
Bulgaria	0.133623285	0.090906759	0.039400295	0.077456216	0.294861	0.85204
Czech Republic	0.167721709	0.139045569	0.183379032	0.281067524	1.093353	2.021406
Estonia	0.022847711	0.017287862	0.064455905	0.068890835	2.82111	3.984925
Croatia	0.073079146	0.053006868	0.140453151	0.183548132	1.921932	3.462724
Hungary	0.167000583	0.127320072	0.034323874	0.06182537	0.205531	0.48559
Latvia	0.038721316	0.024927094	0.023600633	0.03890327	0.6095	1.560682
Poland	0.625720449	0.494829034	0.511281004	0.675235066	0.817108	1.364583
Romania	0.367055126	0.252250711	0.110811399	0.285159086	0.301893	1.130459
Slovak Republic	0.088132596	0.071076417	0.086767263	0.120211274	0.984508	2.252184
Slovenia	0.032528898	0.027209706	0.060352358	0.061281277	1.855346	2.252184

Table 1. Cg 2000 & Cg 2019.

Source: Čaušević, F. (2017) & Čaušević, F. (2019)

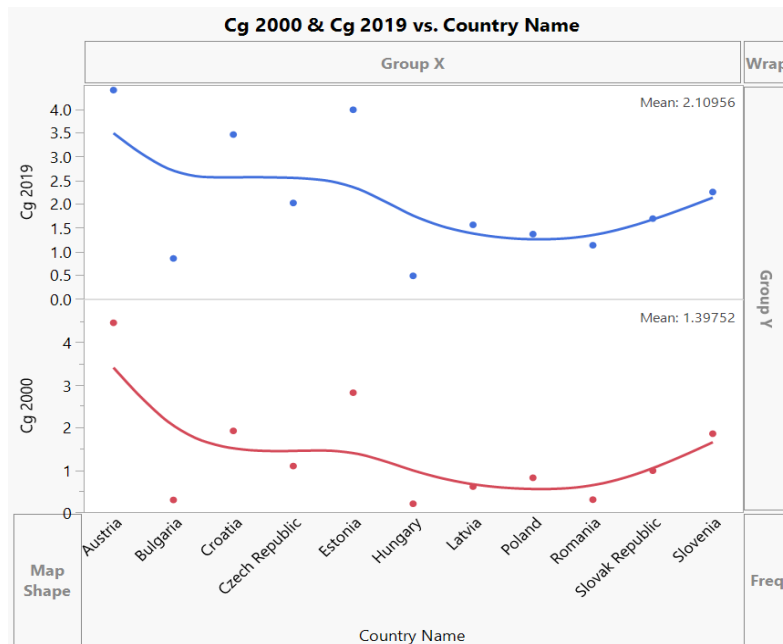


Figure 8. Cg Compared, Compared - CECs

In Figure 8, we can see the rise in growth coefficients of all the subjected countries to a considerable extent, the only exception is Austria. In case of Austria the Cg in 2000 was 4.467622 and in 2019 it turned out to be 4.399262 so the indicated %age change in Cg is negative as we can see in Table 2, due to the reduced GDP share in the world GDP over the

period of time. Also, the KaOpen and KaNew for the Austria, Estonia and Latvia are observed as a steep line over the years in figures 10 and 11. On the other hand, Bulgaria, Czech Republic, Hungary, Romania and Latvia show a considerable growth in terms of GDP shares and hence the increase in growth coefficients (%age changes in Cg) as we can compare from figure 8.

Country	%age change in Cg 2019/2000
Austria	-1.530114672
Bulgaria	188.9633604
Czech Republic	84.8813556
Estonia	41.25379479
Croatia	80.16888966
Hungary	136.2607271
Latvia	156.0595119
Poland	67.00155126
Romania	274.4567561
Slovak Republic	71.79097367
Slovenia	21.38892707

**Table 2.** %age Change in Cg

(Source: Čaušević, F. (2017) & Čaušević, F. (2019))

### Conclusion

Based on the methodology and data from financial databased and indexes, this paper contributes towards measurement and analyses-based view of the measures of financial liberalization compared in retrospective manner. Central European countries have been discussed in terms of capital inflows, successful reform in banking sector, financial sector leniency for cash inflows, financial regulation and the impacts of these measures (as a result of financial liberalization) upon the overall economic development. Developed financial systems formulate a structured saving to support long term investments and better financial growth. In early 2000, the Czech Republic, Slovakia and Slovenia show a challenging phase with respect to their banking sector and privatization matters as in financial terms, while the Hungary and Poland being stable having advanced financial systems in CECs, faced the challenges of competition across Europe. Wagner & Iakova (2001) particularly mentioned that these countries needed stabilized financial, corporate governance and risk management policies in heavy capital inflows scenarios at that point in time. Analysis of five countries being central European states in 2000 and assessment the financial liberalization measures in the period 1995-2000, the discussion emphasized on how the financial sector supported the microeconomic stability in the region (Wagner & Iakova, 2001).

It has been evident by literature hat in the early executions of financial liberalizations around the world benefited the developed economies as China, US and Germany. In the CECs the liberalization measures were fully implemented in the start of 2001 as per financial regulation measures by EBRD. This process extended the financial liberalization in the region in addition to stock exchange integrations in many succession countries as Bulgaria in 1991 and the banking sector reforms across the board as for two tier banking systems in Romania. Later on, the privatization and increased investments boosted the capital flows and hence the improved assets.

The major global and regional financial institutions as ECB, EBRD, World Bank IMF and Bank for International settlement played an important role in lessening the regulatory restrictive controls over financial markets and the interest rates. Financial openness has created the basis of financial frameworks to open ways of capital flows from financially stable to the emerging markets to yield higher rates of returns over savings turned in investments. Financial liberalization would hence be a fruitful intervention in financial development the stakeholders

of capital in established economies get higher rate of returns on capital overseas, whereas salary from labor within recently liberalized developing economies is rising, much appreciated to the making increased capital proportion and incomes. In recent years, Austria GDP growth observed less (2%) than that of 3 % in 2018. Bulgaria reduced its growth from 3.7 % to 3.1 % in 2018 provided the overall economic growth above the EU average. Czech Republic recorded 2.9% GDP growth with increased investments in automation sector. Hungary and Latvia recorded 4.8% GDP growth in 2018 (Latvia's highest since 2011) as improved financial performance in recent years, also HCB (Hungarian Central Bank) achieved target inflation rate of 2.8%. Lithuania real GDP boosted to 3.9% in 2017 due to increased banking credit activity and industrial investments with reduced GDP growth in 2018 and 2019. Poland being largest economy in CEE with 5.1 % GDP growth in 2018 being most favorable for banking sector development. With improved banking sector development, Romania also recorded 4.1% growth, as same as Slovakia. Slovenia recorded it to be 4.5% in same year with a slight reduction in 2019.

Managers of financial institutions are independent to transform financial institutions and financial products far from just relocating savings to borrowers. The financial segment could be a creator of deposits much appreciated to its capacity, increasing credit. While in periods of take-off, growing credit gets to be an endogenous maker of unused deposits. This develops financial uncertainty of the advanced economies. Opposite to standard equilibrium-based models of demand and supply for financial reserves, advance economies subsequently require more stable financial frameworks and governance. For instance, China's remarkable financial presentation because of the openness of its economy. Additionally, China's example might, after all, possibly be an exception, be that as it may enormous, and a precise assessment of the speculation of the effect of money related liberalization on development. As part of future scope of this study, one can extend the scope in regional financial liberalization analysis. More development is encouraged in the area of financial liberalization indexes being a very vital insight in economics research.

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Appendix 1.

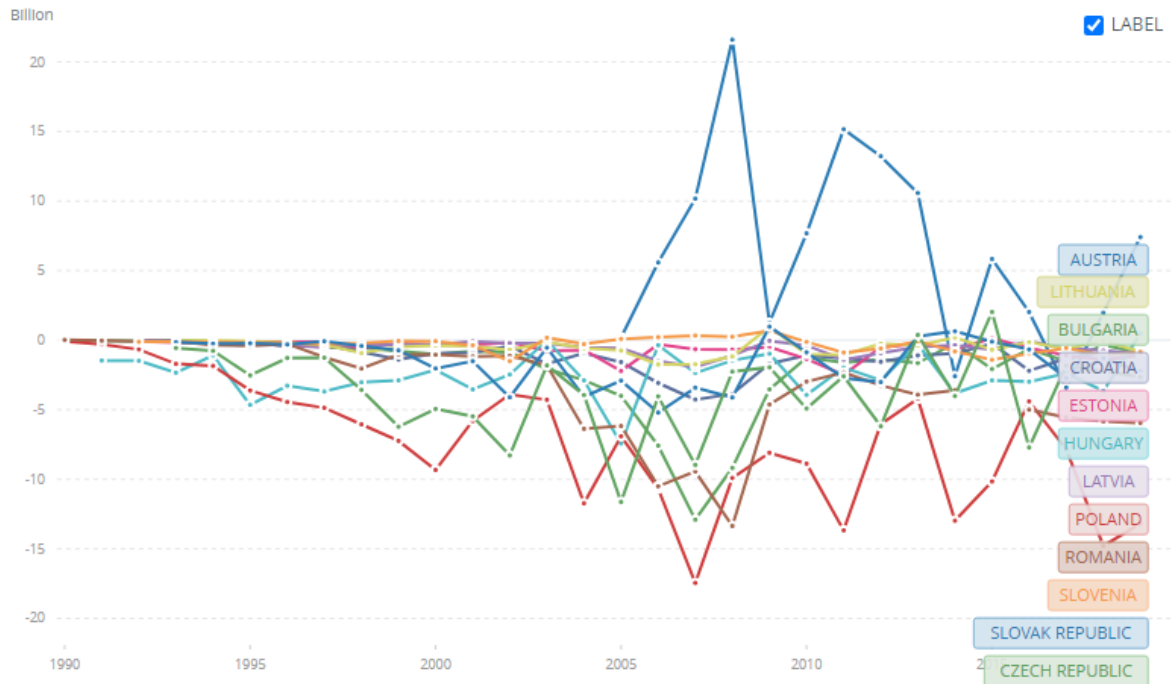
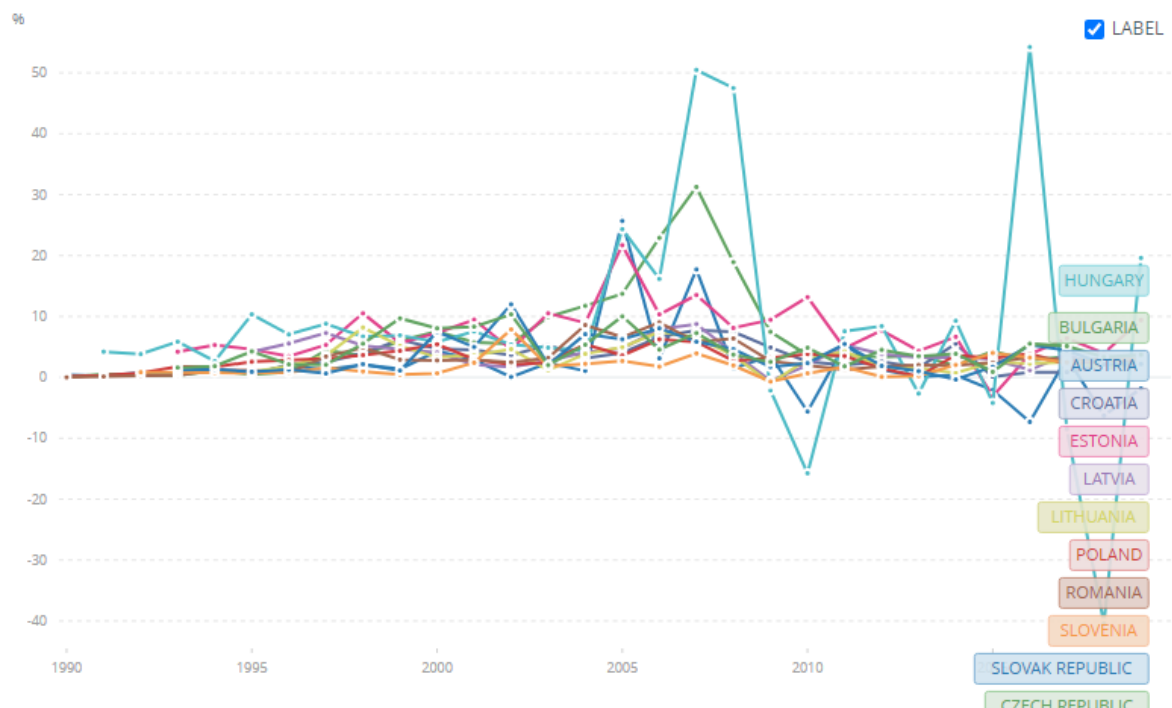
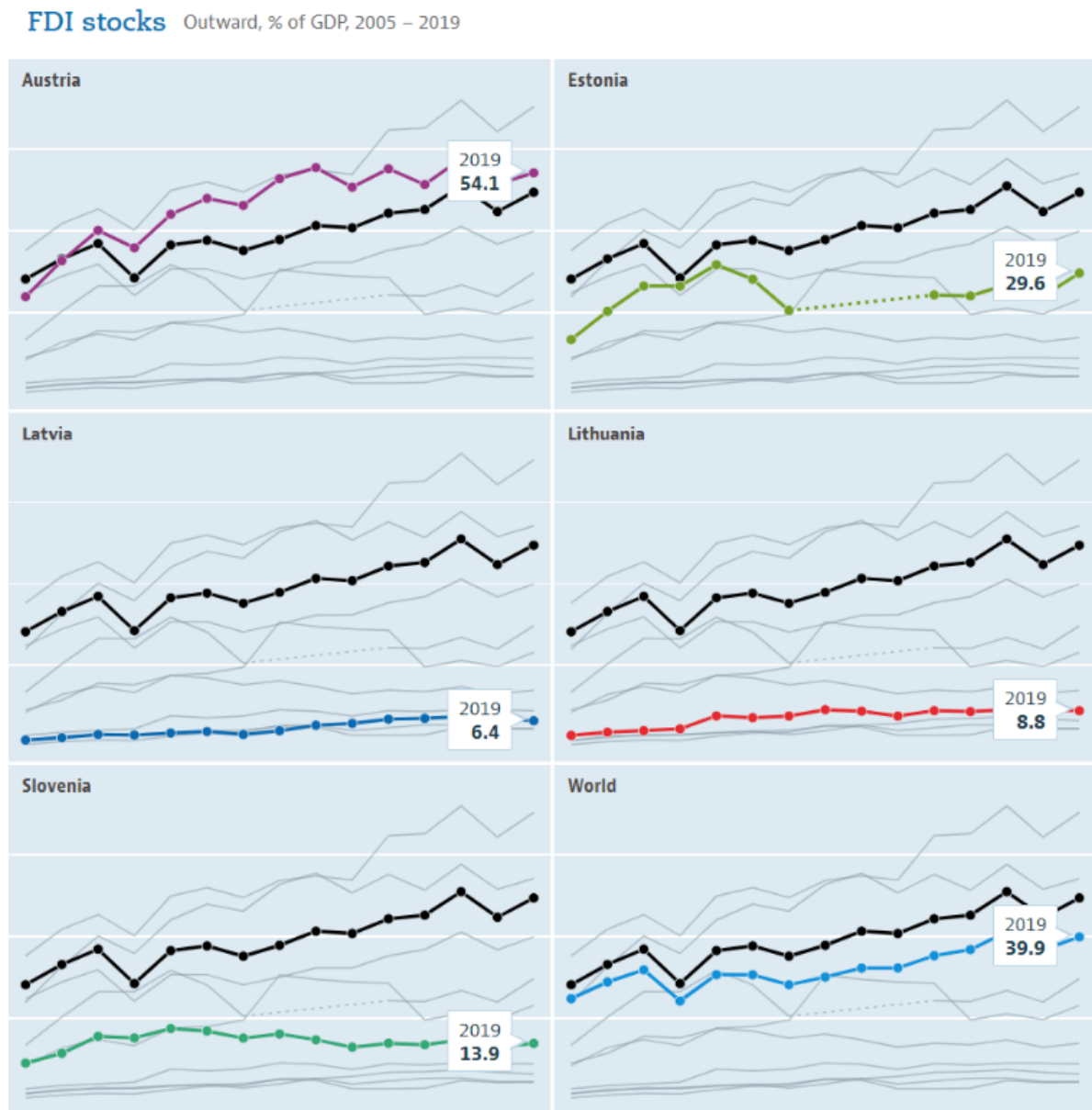


Figure 10. Foreign direct investment, net (current US\$)<sup>10</sup> – CECs  
(Source: World Bank)



<sup>10</sup> <https://data.worldbank.org/indicator/BN.KLT.DINV.CD?end=2019&locations=AT-BG-HR-EE-HU-LV-LT-PL-RO-SI-SK-CZ&start=1990>

**Figure 11. Foreign direct investment, net inflows (% of GDP)<sup>11</sup> - CECs**  
(Source: World Bank)

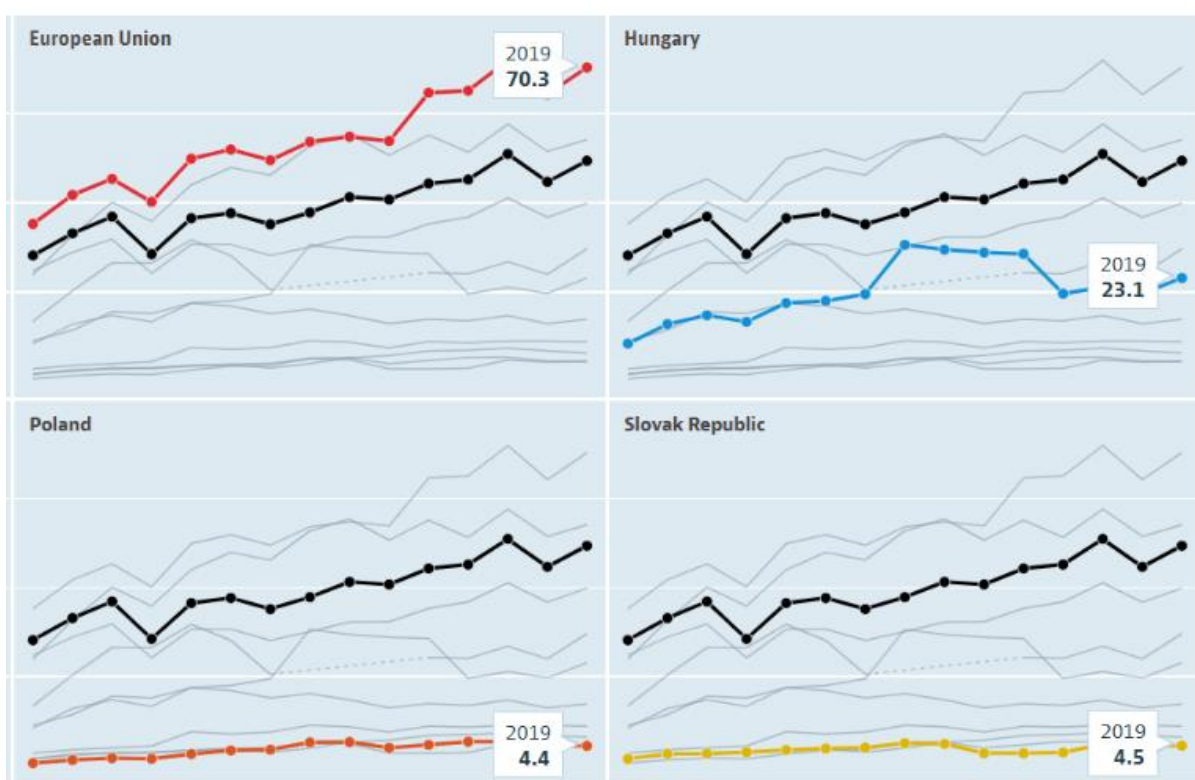


**Figure 12a. Foreign direct investment, Stocks (% of GDP)<sup>12</sup> - Austria, Estonia, Latvia, Lithuania, Slovenia, World.**  
(Source: OECD)

<sup>11</sup> <https://data.worldbank.org/indicator/BN.KLT.DINV.CD?end=2019&locations=AT-BG-HR-EE-HU-LV-LT-PL-RO-SI-SK-CZ&start=1990>

<sup>12</sup> [OECD data Online Graph: Black line OECD average, Colored line for country trend](#)





**Figure 12b.** Foreign direct investment, Stocks (% of GDP)<sup>13</sup> – EU, Hungary, Poland, Slovakia.

(Source: OECD)

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<sup>13</sup> [OECD data Online Graph](#)