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# The Eurozone's influence on the cyclical macroeconomic performance: comparative analysis of Slovenia and Croatia

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## ABSTRACT

This paper analyses the impact of cyclical external shocks on the macroeconomic performance of Eurozone and EU member countries. The latter is achieved through a comparative study of two EU countries, Slovenia and Croatia, of which only the former is a Eurozone member state. Cross-country differences are observed over the 2000-2018 period, thus covering all stages of the economic cycle. The primary hypothesis is that the Eurozone economic integration provides its members with comparably greater macroeconomic stability and balanced growth rates. The research elaborates on the possibilities and effects of more autonomous macroeconomic adjustments tailored to the specific needs of non-Eurozone EU countries. Methodologically, the study exhibits an intricate nexus among theoretical, empirical, and institutional economics and shows that the impact of the country's international interconnectedness, stemming from the economic and geographical links, bears greater importance than Eurozone membership. Concurrently, this analysis confirms that whether the Eurozone's benefits outweigh the shortcoming of monetary sovereignty abnegation depends predominantly on the capabilities of individual countries and Eurozone's institutions to design and execute an effective monetary-fiscal policy mix.

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O11; F15; F45; P52

## 1. Introduction

Despite the promises enshrined within the founding treaties, the recent socio-economic developments showcase that the EU falls short in achieving cross-country convergence, balanced growth, harmonised development, and reduction in the backwardness of the least developed regions. Therefore, it is no surprise that the skewed integrational net benefits are increasingly scrutinized and repeatedly criticized by academics and the general public alike.

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For extra-Eurozone EU countries, one of the most important issues is how the introduction of the Euro will impact their macroeconomic performance. The countries are weighing the potential of national policy measures to influence macroeconomic developments against the loss of monetary sovereignty, which leaves them excessively dependent on fiscal toolkits with external constraints. While the Eurozone expansion continues to be a highly desired political process purportedly promoting cross-country efficiency and prosperity, concerns about winners and losers of enlargement among the current and applicant countries remain relevant (Bolle et al., 2002), and are further exacerbated by the cyclical movements.

In line with this, Eurozone's (dis)advantages are frequently studied either by observing macroeconomic developments in the pre-and-post-euro periods (Çiftçioğlu & Betyak, 2014) or by comparing the macroeconomic performance and competitiveness of current and candidate countries. It is worth mentioning that the latter approach is applicable, particularly when addressing the Eurozone enlargement to Central and Eastern Europe (CEE). To contribute to the ongoing debate, this paper takes a middle route by identifying the cross-country macroeconomic performance differences and the role of economic policies by analysing Slovenia and Croatia between 2000 and 2018. The analysed period covers the complete economic cycle and allows for the systemic investigation of its constituent phases, which makes it possible to analyse the differences in the cyclical impacts on the macroeconomic stability of Eurozone and non-Eurozone EU countries.

Consequently, based on the authors' previous work (Došenović Bonča & Tajnikar, 2018; Tajnikar, Došenović Bonča, and Rubinić 2021), the current paper develops a compelling cross-country case to address the following two hypotheses. First, it investigates whether or not the Eurozone provides its members with greater stability. At the same time, given that different cyclical phases require distinct remedies, this study's purpose is the identification of differences in policy responses between countries that differ concerning the integrational membership. Hence, the secondary concern is investigating if conditions under which countries retain the power to design their monetary policy and execute fiscal policies with fewer restrictions allow them to implement tailor-made adjustments, which improve their country-specific performance.

To explore the hypotheses posed, the focus is placed on examining the impacts of cyclical movements on the macroeconomic performance of Slovenia, which is a part of the Eurozone and Croatia, which is an EU country but has not yet adopted the common currency. The comparative sample selection, derived from distinct integrational status, enables the investigation of the influence of Eurozone membership over the country's macroeconomic performance and the implications of resulting limitations for national decision-making.

Methodologically, the study relies on an intricate nexus among theoretical, empirical, and institutional economics. From the theoretical viewpoint, the investigation is restricted to the macroeconomic analysis of economic policy, following the principles drawn from the pluralist tradition (Galbraith & Darity, 2005). Derived from the statistical data, the papers' empirical component allowed for investigating the distinct cross-country cyclical adjustment demonstrated during a pronounced economic cycle.

On these grounds, the interpretation of the country differences in the observed patterns considers the Eurozone's fundamental institutional peculiarities, which exert vast influence over the employment of monetary and fiscal policies.

The remainder of this study is structured as follows: the second section positions the current research within the existing body of literature; the third section provides a description of Slovenia and Croatia's economic profiles and macroeconomic fluctuations relative to the Eurozone's cyclical movements; the fourth section and investigates effects of the selected determinants on the country-specific macroeconomic performance variations; the fifth section presents the results and concludes by discussing the findings, practical study's limitations and future research potential.

## 2. Literature overview

Whether the subject of analysis is macroeconomic developments in the pre-and-post-euro periods or the comparative competitiveness of current and candidate countries, the Eurozone's influence on cyclical macroeconomic performance remains unambiguously under researched.

The reason why this topic is marginalised is the fact that over 84% of the total EU's economic activity is produced within the Eurozone (Eurostat, 2021), despite that the advancing European monetary union is one of the key responsibility's countries must pursue after joining the EU.

Considering that six of eight potential Eurozone member states come from the CEE, this regional topic of European importance must receive proper academic attention. Since entering the Eurozone as an integrational leap mandates socioeconomic transformation and exercise of thrust in the pan-European agenda, this paper aims to re-question main stylized facts of particular importance for the CEE countries.

Given that out of all CEE-EU countries (excluding Baltic), only Slovenia and Slovakia have adopted the euro, existing literature provides lessons on the experiences these two countries offer to future Eurozone entrants (Banerjee, et al., 2011). On the other hand, Dandashly and Verdun (2015) provide a systematic analysis of whether the benefits of the Economic and Monetary Union outweigh shortcomings by comparing Slovenia and Slovakia's macroeconomic developments with prospective Eurozone members to shed light on reasons behind the general reluctance of advancing the integrational status.

A considerable body of literature draws comparisons between Slovakia and Czechia, countries exhibiting comparable economic histories with Slovenia and Croatia. For example, Polyák researched the impact of euro adoption on the competitiveness of Czechia and Slovakia (Polyák, 2012) and compared their export performance against the old EU member states (Polyák, 2016). He showed that the currency changeover typically stimulates foreign trade between member states, but to a much lower extent than previously believed. Havlat, et al. (2018) also compared Slovakia and Czechia in terms of their economic convergence with the EU and argued that Slovakia's Eurozone accession is likely to have boosted its economic advancement.

At the same time, comparative studies including Slovenia and Croatia continued to be neglected despite their gravity for the Balkan region. That having been said, there

are several reasons for selecting Slovenia and Croatia, the only EU country in the region yet to adopt the euro, for the cross-country comparison. As explained, they differ in their Eurozone status, but both are CEE countries resembling socioeconomic profiles, social norms, and institutional settings (Babić & Lučev, 2019). With shared modern economic history (Uvalić, 2018), they are comprised of post-transitional, mixed economic systems, are small open economies, and are a part of the European periphery (Rubinić & Tajnikar, 2019, 2020). These similarities enable us to explore advanced hypotheses while excluding the impact of those cross-country differences that are not the focus of the study, thereby reducing bias due to confounding.

While the economies of these regional neighbours have been compared before, the previous research focused either on individual countries (e.g., Lavrač & Majcen, 2006; Mihaljek, 2003), particular industries (e.g., Gričar, Šugar & Bojnec, 2021) or differences in overall economic performance due to different exposure to conflicts after the breakup of Yugoslavia as well as Slovenia's faster EU accession (e.g., Stiperski & Lončar, 2008; Kešeljević & Spruk, 2021). Moreover, numerous authors focused on comparative research in social and public policy development (Babić & Lučev, 2019; Lajh & Petak, 2015), varieties of capitalism approaches (Lučev & Babić, 2012), income redistribution (Čok et al., 2013), and export competitiveness (Stojčić et al., 2012).

However, to our knowledge and excluding inaccessible conference presentation by Adams (2011), no prior publications have focused on the holistic implications of differences in Eurozone status on the overall macroeconomic performance inclusive of cyclical importance between these two countries. Following the abovementioned, the principal purpose of the current exposition is to provide missing content and remedy the literature gap on the topic that exerts an enormous significance for the region, future Eurozone entrants, and Europe at large.

### **3. Slovenia and Croatia's economic profiles and Eurozone area cyclical synchronization**

Slovenia is the regional pioneer regarding the integrational accession, which occurred in 2004 during the single biggest enlargement of the EU. Soon after, in 2007, Slovenia undertook another integrational leap forward. With only three years apart, Slovenia transitioned from an EU to a Eurozone member state at record speed (Lavrač, 2010). Through this process, Slovenia pegged its national currency to the euro by entering the Exchange Rate Mechanism (ERM II) in 2004. Soon after, in 2007, Slovenia surrendered its monetary sovereignty and retired its national currency (Tolar) for the benefit of becoming a Eurozone member and adopting the euro as its supranational legal tender.

Following a decade-long accession process, as the region's number two, Croatia entered the EU in 2013. The Treaty on European Union (2012, Article 3) and the Treaty on the Functioning of the European Union (2012, Articles 3, 5, 119-144, 219 and 282-284) set the general principles, purpose, and basis of the EU's law. From these treaties, it follows that once the ratification of the international agreements has been completed (except for Denmark with an opt-out clause), all EU countries are required to pursue the establishment of the Eurozone and must adopt the common

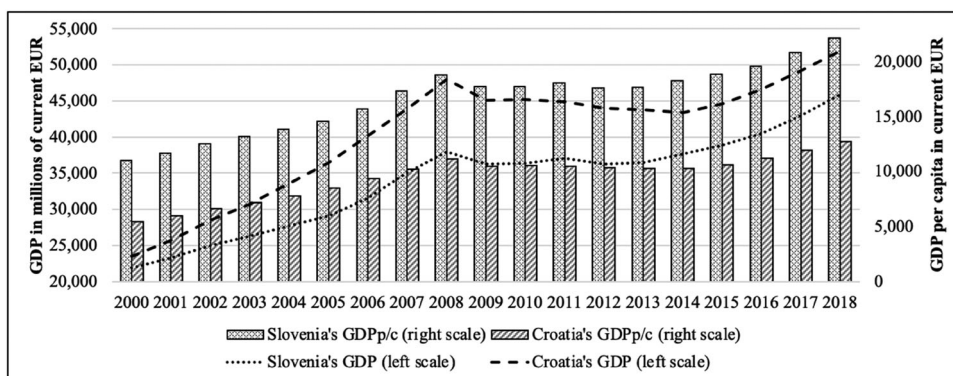
currency upon fulfilling the convergence criteria. Following these contractual obligations, Croatia's responsibility is to enter the Eurozone upon completing the required criteria. The European Central Bank (2020) Convergence Report states that, as of 2019, Croatia fulfils all convergence criteria besides the exchange rate stability. Hence, the last obstacle towards Croatia's joining the Eurozone is the exchange rate criteria, requiring Croatia's participation in the ERM II for at least two years without severe tensions. Croatia entered ERM II in 2020, and the European Council (2022) adopted the required legal acts enabling Croatia to join the Eurozone and introduce the euro on 1 January 2023.

From the above, it follows that (between 2000-2018) Croatia differed from Slovenia in that it preserved its monetary autonomy and national currency, the kuna (HRK) (Šonje, 2019). Therefore, Slovenia had to rely on fiscal policies and is thus dependent more on taxation and budgetary measures to proactively manage its economic affairs. It is, however, essential to note that for Slovenia, fiscal policy measures were also under the constraints of the Eurozone intended to maintain sound and sustainable public finances. The latter is quite controversial given the mounting evidence in the economics literature (Stiglitz, 2016; Lapavitsas, et al., 2012; Lapavitsas, 2019, inter alia) claiming that the Maastricht convergence and Stability and Growth Pact's criteria, to a great extent, disable countries from using fiscal adjustment mechanisms.

The comparative narrative of neighbouring countries must be grounded in and acknowledge vital economic, geographic, and demographic cross-country differences. Slovenia and Croatia share numerous mutual economic features, exhibit a high degree of cross-country interconnectedness, and are structurally interdependent as members of the EU. Regardless, based on the 2018 statistical data provided by the World Bank (2021) and Eurostat (2021), some key differences between the two countries are worthy of consideration.

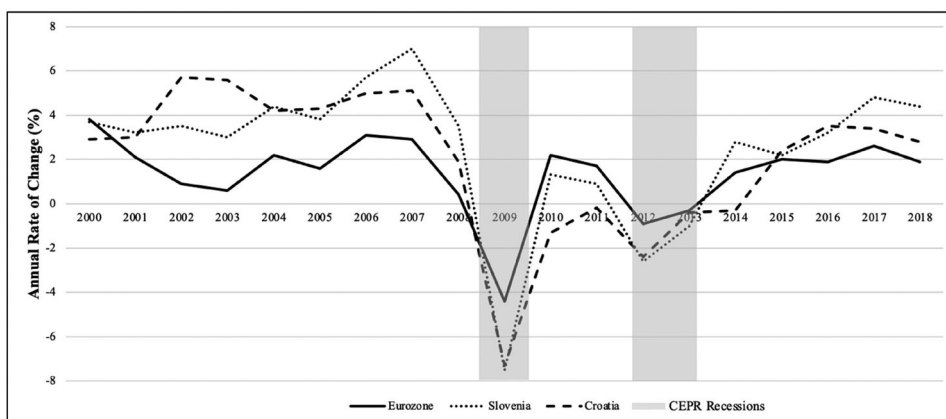
In terms of land size, Croatia is 2.7 times bigger than Slovenia. Similarly, Croatia's 4,08 million inhabitants exceed Slovenia's 2,06 by a factor of two. Out of this population count, with a 1,02 million labor force, Slovenia had a higher labor-force-to-population ratio of 0.49 in 2018. In contrast, with a working population of 1,81 million, Croatia's ratio was 0.44. Out of the total workforce, 5.1% and 8.4% remained unemployed in Slovenia and Croatia (Figure 7), respectively. In light of this, it can be calculated that the employed-to-population ratio was 0.47 for Slovenia and 0.4 for Croatia. Croatia's GDP in 2018 amounted to 51,6 billion euros; in Slovenia, it was 45,7 billion euros. Slovenia's GDP per capita at 22,080 euros was 1.7 times higher than Croatia's at 12,620 euros (Figure 1). The structural decomposition of aggregate output shows that both countries had a high share of services in the value-added (over 55%). Finally, as a percentage of GDP, Slovenia had a nine percentage points higher share of industry and manufacturing than Croatia. Taking the landmass as a geographical size indicator, GDP as its economic counterpart, and its per capita values as a proxy of development, it becomes evident that Croatia is a bigger and less developed country than Slovenia.

Comparing the growth rates of Slovenia, Croatia and the Eurozone as well as their overlapping periods of recession according to dating by the Centre for Economic Policy Research—CEPR (2021) reveals the cyclical patterns of the Eurozone, Slovenia, and Croatia. Starting from 2005 to 2007, there was a period of the first expansion.



**Figure 1.** Slovenia and Croatia's GDP and GDP per capita.

Source: Eurostat (2021)



**Figure 2.** Eurozone, Slovenia, and Croatia's Real GDP growth rates.

Source: Centre for Economic Policy Research (2021) and Eurostat (2021).

From 2008 until 2009 was a period marked by the Great Recession. This crisis was followed by the third period of volatile revivals and recessions. In the case of Slovenia's economic activity, between 2010 and 2011, the country achieved a positive GDP growth trajectory. In contrast, 2012 and 2013 were the second contraction period with a negative growth rate. Subsequently, a positive reversal occurred in 2014, and Slovenia entered the second expansion phase, lasting until the end of the observed period. Comparably, after the period of expansion peaking in 2007 and rapid contraction until the end of 2009, Croatia's third phase was a recession period of negative growth rates between 2010 and 2014. The contractionary period soon rebounded into the second expansion, with positive GDP growth lasting from 2015 until 2018.

Figure 2 supports two conclusions. First, the decreasing variability in the growth rates among the Eurozone, Slovenia, and Croatia over the analysed period points to the across-time, cross-country synchronisation. The former is in line with the synchronisation of business cycles reported by Arčabić and Škrinjaric (2021). Second, despite the country-specific movements, and based on the overall synchronised



growth fluctuations, economic dependence, and interconnectedness, Croatia's macro-economic performance confirms its close economic ties with the Eurozone. Therefore, it appears that irrespective of the different integrational stages, Slovenia and Croatia are intrinsically connected to and constituent components of the Eurozone's economic sphere.

#### 4. Nexus between country-specific characteristics and the Eurozone area

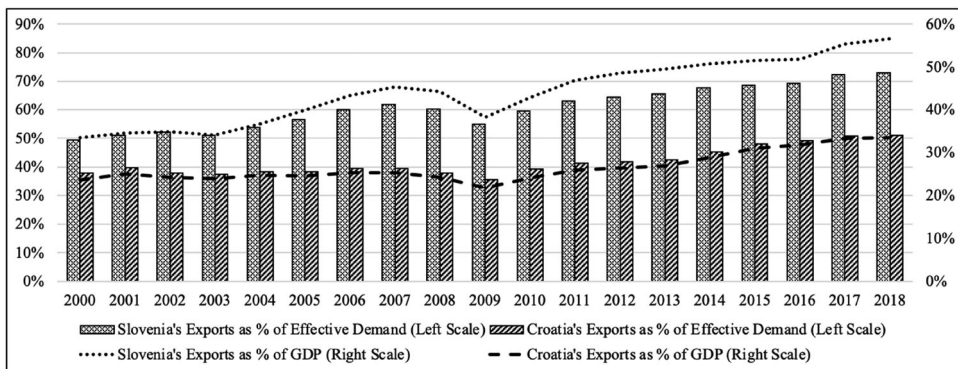
Cyclical fluctuations of Slovenia and Croatia reveal that the driving forces behind the dynamic movement of economic indicators vary significantly due to the following country-specific characteristics.

##### 4.1. Country size and the role of domestic demand elements

Analysing the export component of the effective demand (GDP plus aggregate imports) alongside the GDP and population size suggests a negative correlation between the two (Figures 1 and 3). This is to say that Slovenia, as a smaller country, has had a larger share of exports in effective demand relative to the comparably larger Croatia throughout the analysed period. Croatia's smaller export-to-effective-demand ratio (34% in 2018 relative to Slovenia's 49%) indicates that the larger domestic market renders the country less dependent on international trade movements.

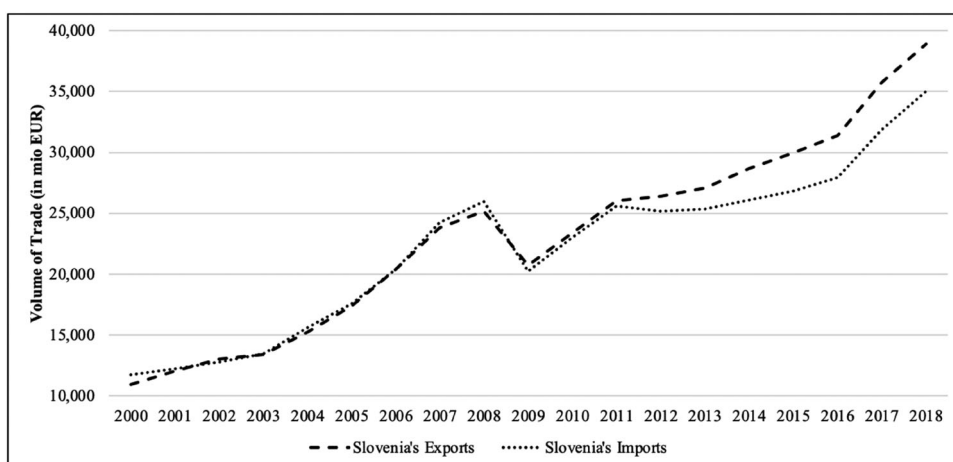
The latter shows that the elements of effective domestic demand of a country larger in size bring about higher explanatory power over the manifested macroeconomic trends. The latter argument can be further exemplified through the importance of exports as the external factor of Slovenia and Croatia's economic growth. To advance this argument, Figures 4 and 5 present a detailed portrayal of the cross-country volume of trade and international trade balance.

Slovenia had trade surpluses in 2002 and from 2009 until 2018. Regarding the trade openness index, as the ratio between the sum of exports and imports relative to GDP, Slovenia's global trade engagement increased throughout the observed period (from 104% in 2000 to 161% in 2018). A surge in exports fuelled Slovenia's economic revival between 2005-2008 and expansion from 2014 until 2018. Similarly, the



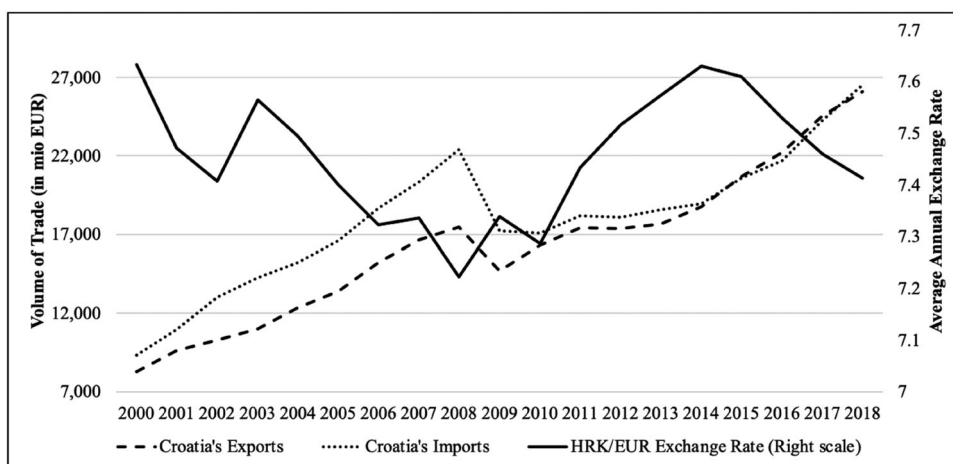
**Figure 3.** Slovenia and Croatia's Exports as % of GDP and Effective Demand.  
Source: Eurostat (2021)





**Figure 4.** Slovenia's export and import dynamics.

Source: Eurostat (2021)



**Figure 5.** Croatia's exports, imports, and exchange rate dynamics.

Source: Croatian National Bank (2021) and Eurostat (2021).

contractions of economic growth in 2009 and 2012-2013 can be associated with declining foreign demand for domestic goods and services.

The latter was most apparent in the 2008-2009 crisis when the 17% decline in exports resulted from the Eurozone's economic growth contraction of 4.5%. In aggregate terms, exports decreased by almost 4,4 billion euros, negatively impacting Slovenia's effective demand. Given its exogenous nature, the Slovenian decision-makers could not stimulate foreign demand for national goods and services produced in Slovenia. Hence, the remaining components of effective demand became crucial for managing the country's macroeconomic conditions to safeguard stability and prosperity.

Developments between 2010-2013 indicate another interdependence between Slovenia's domestic and foreign effective demand. During this period, the opposite dynamics took place. Slovenia experienced a surge in demand for its exported goods

and services as the primary outcome of the rapid recovery of Slovenia's main Eurozone trading partners. While positive but anaemic growth of exports also continued between 2012-2013, the Slovenian economy experienced a decline. However, this can be unequivocally attributed to substantial cuts in government consumption in 2012 (see [Figure 8](#)) that outweighed the beneficial effects of increasing exports. This discussion supports the conclusion that Slovenia's macroeconomic performance in the analysed period depended on exogenous exports.

In contrast with the export-driven Slovenian case, Croatia's export patterns reveal a different story. Croatia's economy is undeniably much less open than Slovenia's, with a trade openness index of 101% in 2018 and trade surpluses reported only between 2015 and 2017. With weakly increasing trends, Croatia's shares of exports in effective demand and GDP rose to 34% and 50% in 2018, respectively. Thus, to identify Croatia's main determinants of macroeconomic conditions, the focus must be placed on the other effective demand components, namely those of domestic demand.

As opposed to the export-led growth of Slovenia, the Croatian economic climate was primarily influenced by domestic demand. In terms of the structure of domestic demand, household consumption played a key role, reaching a share of 39% in 2018 while exceeding the share of exports by five percentage points. Relatedly, the importance of investments disproportionately exceeded the role of exports. Over the 2006-2008 period, Croatian investments were based primarily on the external borrowing of the corporate sector. Weighted against the Eurozone trends, their peak in 2008 was the single biggest reason behind the delayed downturn of economic activity in 2009. A sizable decline in exports caused Croatia's 2009 economic freefall; with its origins in the declining Eurozone's demand, the negative impact on the Croatian economy was exacerbated by the all-time low HRK/EUR exchange rate ([Figure 5](#)).

Increasing exports in the post-2009 period, conditional upon rising European demand, contributed to Croatia's recovery from the contractionary phase. In this process, active monetary measures through the depreciation of national currency have had a crucial role. Regardless, it took Croatia much longer than 2010-2011 to reach the path of sustainable recovery. This was because the benefits of growing exports were offset by the insufficient and delayed increase in the inner-country effective demand. The former supports the above-stated conclusion that the domestic demand-led growth inherently conditioned Croatia's macroeconomic performance.

During Croatia's second expansion, between 2015 and 2018, exports and investments contributed to positive growth. The export patterns were inseparable from the HRK/EUR exchange rate dynamics. The 2010-2015 kuna depreciation incentivized exports, whereas subsequent appreciation led to their slowdown. Weaker investments and government consumption caused 2016 Croatia's diminishing GDP real growth rate ([Figure 2](#)).

Compared to Slovenia, the less significant influence of exports and dependence upon European demand was the reason behind Croatia's negative growth rates between 2011 and 2012 and postponed recovery from the contraction caused by the Great Recession. The latter, considered alongside the domestic demand influence, imposes that a comparative analysis of Slovenia and Croatia confirms the importance

of the economic size and internal market regarding the countries' dependence on foreign (Eurozone) economic circumstances.

#### **4.2. Impact of Eurozone accession on trade openness**

The findings regarding the impact of exports on macroeconomic performance in both countries mandate the interrogation of whether the Eurozone accession intensifies their trade openness. Consequently, the existence and the degree of the Eurozone influence over the country's integration into international relations must acknowledge the cross-country differences in exports' shares in economic output and effective demand.

For this purpose, data from [Figure 3](#) offer a compelling insight. They reveal fluctuations in the export shares with a rising trend observed throughout the entire period for both countries. Interestingly, the difference in the shares of exports in GDP and effective demand between Slovenia and Croatia increased, implying that the gap intensified. Coupled with growth patterns in [Figure 2](#), this contradicts the convergence theory, which presumes that the country with the lower starting point should generally enjoy higher growth rates following the European single market accession. These conclusions are thus in line with Dobrinsky and Havlik (2014), who noted that the 2009 crisis interrupted the convergence.

Hence, it can be asserted that Eurozone membership, and the common currency implementation, foster the country's integration into international trade arrangements. Slovenia's higher macroeconomic exposure to and export-led dependence on the Eurozone is no surprise. From the country's economic and geographic sizes and observed export dependence, it follows that the smaller countries are increasingly vulnerable and subordinated to the international markets' movements. Even more, this vulnerability intensifies with a small country's accession to the Eurozone.

#### **4.3. Impact of Eurozone accession on growth stability**

The exhibited data suggest that a substantial difference exists in the cyclical variability of economies. This raises the question of whether or not the countries' higher participation and integration within the EU, and the Eurozone, provide the member country with greater economic stability. The most pronounced extremes in GDP growth rates were observed in 2007 and 2009. The Eurozone growth rate was a positive 2.9% in 2007 and a negative 4.4% in 2009. Equivalently, Slovenia's growth in 2007 was 7%, followed by a decline of 7.5% in 2009. Lastly, Croatia's reached a growth peak of 5.1% in 2007 and a negative 7.3% in 2009. Hence, approximately equal, Slovenia and Croatia's cyclical patterns exposed relatively higher volatility weighted against the Eurozone's across-the-board averages.

In this respect, this comparative cross-country analysis cannot verify that the Eurozone accession and euro implementation are the sources behind exacerbated national economic performance cyclical volatility. Regardless of Croatia's preserved monetary sovereignty, the cross-country observed growth patterns' similarity undeniably confirms the limited influence of euro adoption on cyclical macroeconomic

movements. With preserved autonomy in proactive exchange rate management, Croatia has experienced akin GDP growth fluctuations to those of Slovenia, which had to execute the Eurozone-mandated austerity measures (2012) and financial sector restructuring (bank bailouts of 2013). Therefore, the case for severe criticism regarding the Slovenian and Croatian integrational status departs from the notion that strengthening the economic ties with the European marketplace did not deliver much-anticipated stability in the countries' GDP growth trends. This conclusion especially holds in the case of Slovenia, with a higher level of European integration. The study shows that in both countries, the effects of European integration, amplified through an internal process, led to greater fluctuation in GDP growth. It suffices to repeat that these fluctuations were affected by the country-specific economic policies implemented over the analysed period. As mentioned earlier, this is what constitutes a significant difference between the two studied countries. While Slovenia was obligated to appropriate the common economic policy decisions of the Eurozone and the European Commission, in Croatia, the measures were the outcome of the formally autonomous monetary decision-making.

#### ***4.4. Impact of Eurozone accession on inflation***

Next in line with concerning matters is furnishing an answer to whether euro adoption affects inflation in individual countries. This provides a unique perspective into the impact of European integration, particularly the Eurozone, on the national economies.

In order to approach the subject suitably, it bears repeating that Slovenia fixed its legal tender to the euro by entering the ERM II in 2004 and that the euro became the Slovenian currency in 2007. Once more and irrespective of the euro adoption, overall price levels reflected through the inflation rate measured by the harmonised consumer prices index showed little variability between Slovenia and Croatia. Even during the introduction of the euro, cross-country patterns showed only a minor difference. This is to say that the presented cross-country case confirms that the introduction of a common currency could not be held accountable either for an increase in price levels or for price instability. In other words, and as shown by Pufnik (2017), the Eurozone membership alone does not produce significant inflationary effects and generates almost no impact on the inner-country price levels.

#### ***4.5. The significance of sovereignty in economic policy relative to economic cycle***

As mentioned previously, the principal distinction between Slovenia and Croatia in this analysis lies in that, in contrast to the former, the latter can independently exercise monetary sovereignty via an exchange rate mechanism. Accordingly, Slovenia cannot, and Croatia can tackle any potential destabilizing macroeconomic effects through exchange rate adjustments.

Figure 5 shows the negative effect of Croatia's floating exchange management on the country's exports before the 2009 crisis. Given that the exports were on a continuous ascent, the rapid kuna appreciation between 2003-2006 acted against and did

not contribute to the otherwise stable economic performance. Due to this, and in addition to the reduction in the Eurozone's demand for Croatian commodities, one can infer that the increase in the value of kuna relative to the euro intensified the negative consequences of the Great Recession. Therefore, currency mismanagement has contributed to a significant decrease in the country's exports and delayed recovery from the 2009 crisis. The kuna appreciation did not exhibit the same influence over the imports, which implies that they were largely endogenous.

On the other hand, the Croatian exchange rate policy from 2009 onwards helped overcome the Great Recession and restore macroeconomic recovery through the volume and balance of trade. The 2009 kuna depreciation spurred exports' rebound and has set the country towards a post-crisis recovery trajectory. The latter is most apparent in 2010 when the depreciation caused exports to grow above imports. The Eurozone's economic upturn simultaneously pushed these positive developments even further. The interim consequences of these events became evident in 2015 when the trade balance surplus occurred alongside the negative balance in the capital account, even more so when considering the reduction in public and private gross external debt during this period (Figure 9).

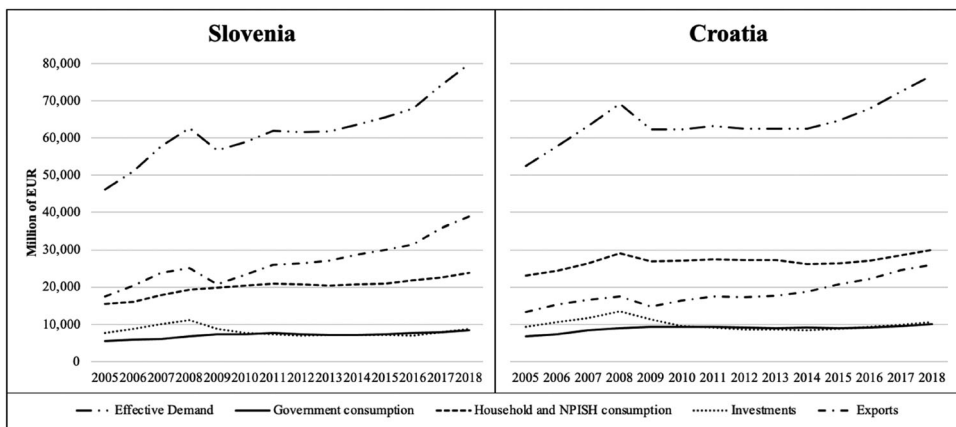
Succeeded by the Great Recession, the continuous depreciation of kuna until 2014 has helped generate Croatia's trade surplus obtained during 2015-2017. The depreciation incentivized exports, whose positive role overwhelmed the shortcomings of effective domestic demand. This effect lasted until the kuna appreciation in 2015. Hence, with a necessary lag, the trade balance returned to the deficit values in 2018, with an export-to-import ratio of 0.98 (Figure 5). In this context, the exchange rate fluctuations have significantly influenced the country's performance. Accordingly, they were the determining factor behind Croatia's macroeconomic imbalances recorded at the end of the observed period (2017-2018). As opposed to Slovenia, with a more limited power to exercise its economic policies, the Croatian case confirms that monetary autonomy can be a progressive vehicle driving economic growth (2010-2015) and the dampening factor impeding economic activity (2015-2018).

From another point of view, as a Eurozone member and in contrast to Croatia, Slovenia was subjected to the fiscal austerity implemented by the European Commission, European Central Bank, and the International Monetary Fund. The effect of these policies, reflected through the dramatic cuts in public spending, had profoundly negative consequences for the Slovenian economy, far exceeding those brought about by Croatia's currency mismanagement.

Starting from 2011, the severe austerity packages (Verbič, Srakar, Majcen & Čok, 2016) involved substantial reforms of the Slovenian banking system. This was followed by the 2012 sizable banking sector's recapitalization, financed through public spending and apparent within the 2013 increase in the government's debt (Figure 9) and deficit (Figure 8). All other fiscal interventions were suspended during that period, and the radical rise in external government indebtedness was channelled to cope with the banking bailout. For this purpose alone, the Slovenian government has injected around 4,8 billion euros to save the banking sector. Ultimately, in addition to the general and hostile contractionary climate, this has lowered expectations and downsized household consumption.

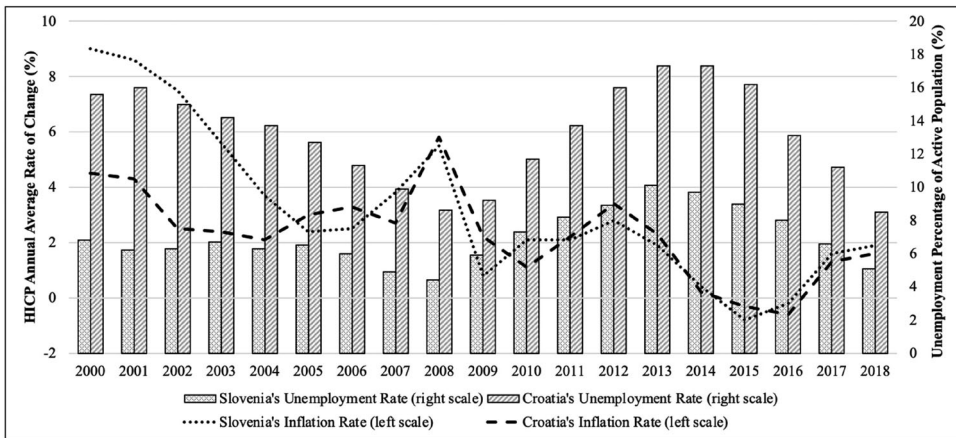
The pessimistic expectations translated into the investment spending standstill (Figure 6) and a negative GDP growth rate (Figure 2). The banking reform failed to provide liquidity to the private sector affected by the crises. Hence, the private sector did not receive a hypothesized extension of credit lines, did not initiate corporate spending, and focused primarily on the existing debt repayment (Figure 9). In addition to the fiscal austerity-imposed cuts in public expenditures and external indebtedness reduction (in 2012 alone, Slovenia's public spending was decreased by around 600 million euros), the post-2013 budget deficit declined, and the government was prevented from effective crisis management. Consequently, the austerity measures fall short of expectations, have generated economic instability, and have delayed Slovenia's macroeconomic recovery for over two years.

Slovenia's austerity measures show that Eurozone membership also affects fiscal policy autonomy. The implementation of the austerity policy in Slovenia in 2012 demonstrates that the Slovenian fiscal policy was not fully autonomous throughout the period. As a non-Eurozone member, Croatia was not subjugated to the austerity policies. Therefore, the cross-country comparison between Slovenia and Croatia's growth rates between 2009 and 2014 displays the full extent of the Troika's influence over economic policy decision-making and macroeconomic performance. This detrimental scenario resulted in Slovenia's reduction in public spending, a rise in external indebtedness due to the banking sector reform, and an economic growth rate of minus 2.6% in 2012. This confirms that the Troika's austerity intervention into Slovenia's fiscal autonomy was impeding what could otherwise be a rapid economic recovery, with much higher growth rates relative to Croatia, whose negative growth rate would remain at minus 2.4% regardless. Finally, it suffices to mention that the austerity package was undeniably a set of harmful measures conceived on counterproductive technical economics and driven entirely by political power relations. Slovenia's case was founded on inaccurate assumptions regarding the excessive indebtedness and purported inability to effectively and independently govern economic affairs. In this regard, the austerity brought about massive disinvestment without facilitating recovery or prosperity, without downsizing foreign indebtedness, and

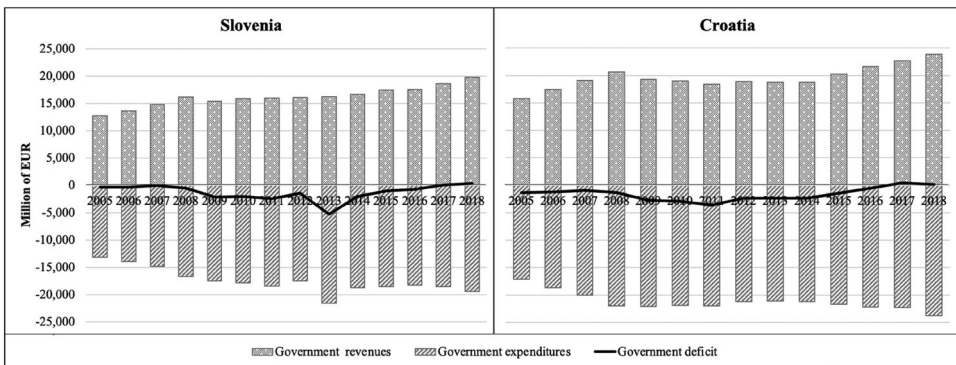


**Figure 6.** Effective Demand Structure of Slovenia and Croatia.  
Source: Eurostat (2021)





**Figure 7.** Slovenia and Croatia’s Harmonised Index of Consumer Prices and Unemployment. Source: Eurostat (2021).



**Figure 8.** Slovenia and Croatia’s General Government Revenue, Expenditure, and Deficit. Source: Eurostat (2021) and Statistical Office of the Republic of Slovenia (2019).

without initiating investment spending. This was the principal cause behind hampering Slovenia’s path towards overcoming the 2009 crisis, regardless of its pre-existing stable route between 2010 and 2011. Based on the aforementioned and accounting for a cross-country comparative case study, it is evident that the Eurozone membership adversely affected the country’s economic revival.

Except for the unprecedented interventions coerced by the Troika, it should be emphasized that the state of accounts of Slovenia and Croatia’s budgets were predominantly endogenous. Namely, the budget revenues were mostly generated as a reflection of the country’s GDP growth, and the economic growth also had the single greatest impact on the budget deficit or surplus. On the other hand, the less volatile government’s budget expenditure did not exhibit a crucial influence over the countries’ economic growth, even during the Great Recession of 2009 (Figure 8).

As depicted in Figure 8, the first expansionary phase of Slovenia’s economic activity has generated steady revenue streams, outpacing the government’s expenditures. This has led to a 92.5% decrease in the government deficit, from negative 380 million euros in 2006 to negative 29 million euros in 2007. Such a considerable downsizing

of net spending before the Great Recession has minimized the government's role in managing the country's macroeconomic (in)balances. By the same token, Croatia has exhibited similar, albeit quantitatively less significant, movements. As shown before, the surging GDP growth between 2000 and 2008 has been built upon Croatia's internal imbalances. Regarding government expenditures, Croatia's deficit has decreased by only 22.1%, from negative 1.2 billion euros in 2006 to negative 981 million euros in 2007. Based on this, it can be concluded that Croatia's rising growth and increasing budgetary revenues cannot be reasonably prescribed to vigorous national fiscal decision-making.

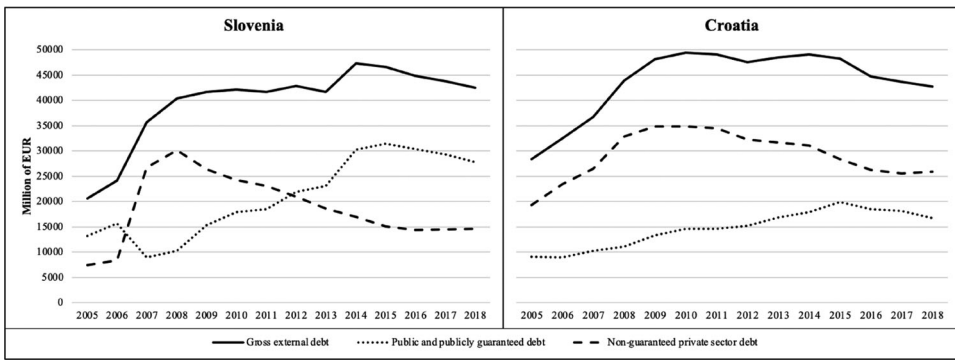
The reversal of economic growth in 2009 downsized Slovenia's government revenues by 800 million euros. This, in turn, had an increasing spill over effect on the government budget deficit and has forced the national authorities to facilitate liquidity by extending credit lines held by foreign lenders. The latter applies to Croatia as well. Amid the crisis of 2009, Slovenia and Croatia's government expenditures preserved pre-crisis trends. Until 2011, Slovenia maintained a rising expenditure trend, whereas Croatia's trend remained close to flat. This has produced a twofold negative effect. Lacking expenditures failed to spur economic activity and stabilize the countries' macroeconomic profile but were sufficient to ensure sustained budget deficits.

Slovenia's increasing revenues balanced the government's budget throughout the second expansion period and not accounting for the funds spent on the national banking bailout. Moreover, as positive trends were initiated in 2013, Slovenia recorded a budgetary surplus in 2017 and 2018. The fiscal balance and surplus were made possible by the surge in Slovenia's GDP growth, which has, in turn, led to a decrease in the country's gross external debt. Corresponding development took place in Croatia, except that the reduction of the government budget deficit started a year later, in 2015.

#### ***4.6. Eurozone membership, access to foreign borrowing, and external indebtedness***

The individual countries' involvement in the European economic area, and the Eurozone, can be additionally assessed from a financial perspective. From this viewpoint, the most important factor is, undoubtedly, the possibility of preserving the financial flows between the rest of the world and the domestic economic sectors. That being said, with a focus on cyclical fluctuation, the principal interest of subsequent research is to address the issue of external borrowing adequately. An educated guess would entail that the Eurozone accession bears significance concerning the country's external debt and borrowing patterns. Nevertheless, the similarity in the exhibited cross-country gross external trends between Slovenia and Croatia suggests otherwise, as shown in [Figure 9](#).

However, one must not neglect that the nature and reasons behind the practices of external borrowing between Slovenia and Croatia were partly different. These cross-country differences were brought about as the result of the systemic forces innate to the dissimilarities between the distinct degrees of economic integration, Eurozone and EU, respectively.



**Figure 9.** Slovenia and Croatia's Public, Private, and Total Gross External Debt.

Source: Bank of Slovenia (2019) and Croatian National Bank (2021).

Figure 9 shows that Slovenia and Croatia's gross external debt dynamics reported comparable cyclical variation. The publicly and publicly guaranteed external (government) borrowing grew in size until 2015, when the indebtedness started to decline. In contrast, private sector debt showed substantial cross-country dissimilarities. Regardless of the latter, the cross-country private sector borrowing showed corresponding trends within the periods up to 2009 (increasing pattern) and between 2015 and 2016 (decreasing pattern).

The country-specific debt movements become most apparent by focusing on the brakes in exhibited trends. Slovenia's private sector borrowing was more volatile in comparison to Croatia's moderate dynamics. Followed by 2004 Slovenia's entry into the EU and the 2007 Eurozone accession, the private sector debt increased by a factor of four between 2005 and 2008. The pattern reversed in 2009 amid the Great Recession. On the opposite end, Croatia has reported an inter-period increase in private debt of 70% during the same period. This cross-country comparison renders two crucial conclusions. First, the external conditions driven by abundant capital availability on the financial markets stimulated investment spending and the private sector's borrowing in both countries. The second is that the EU, and even more so the Eurozone, membership has created a more desirable harbour for foreign capital placement. Hence, Slovenia's comparably steeper increase in the private sector debt over the first expansion period. On these grounds, it can be asserted that the integrational status played a major bearing in the country's ability to attract a larger proportion of the available foreign capital stock intended for financing the individual countries' private-sector entrepreneurial activities.

In this regard, the contesting claims concerning the integrational effect on the private sector's access to foreign capital must be mentioned. They are grounded in the fact that from 2008 to 2016, both countries reported a reduction in private-sector indebtedness. In addition to the latter and irrespective of the different integrational status, the second claim would emphasize that Slovenia and Croatia reported only a moderate effect of the drastic 2009 GDP drop on the government's (public) borrowing. Therefore, the integrational impact on foreign lending was determined, in addition to the country's status, by the time it occurred, i.e., by the existing circumstances on the capital markets.

Over and above the latter, the Eurozone's mandated austerity package imposed severe restrictions on Slovenia's national policymaking. The Eurozone-dictated measures did not affect Croatia, so they have constituted a significant departure point between the two countries. Relatedly, the Slovenian fiscal policies were conditioned by the 2012 austerity ban on government borrowing and the 2014 banking system bailout-averting recapitalization injection. However, these austerity arrangements did not directly affect the private sector.

Different borrowing conditions in Slovenia have resulted in the fact that the country's economic expansion stages have been financed differently. The gross external debt fuelled the first expansion (2005-2007), and the second expansion (2014-2018) was accentuated by the debt reduction (Figure 9). At the same time, the first expansion occurred alongside the country's positive capital account, in contrast to the second expansion, with the negative capital account.

Throughout the first expansionary phase, the exports triggered Slovenia's growth, whereas a positive capital account balance influenced the country's effective demand. In such a scenario, Slovenia has reached levels of full employment (unemployment rate of 5% in 2007 and 4% in 2008; Figure 7), simultaneously with the high external borrowing amounting to 35,6 billion euros in 2007 and 40,3 billion euros in 2008 (Figure 9). Hence Slovenia's economic overheating, evident within its 6% annual average inflation rate in 2007, is no surprise (Figure 7). However, due to rapid export growth, all of those mentioned earlier did not lead to a more significant trade deficit (Figure 4). The rapid growth of the Slovenian economy over this period stemmed from export growth, i.e., from the rise in foreign demand.

Croatia's rapid growth surge during the first expansion has resulted in internal macroeconomic imbalances. These were also the main reason behind the rapid economic growth and external borrowing of the economy. The growth of the Croatian economy did not stem from the rapid export growth but the high investment increase. These investments were generated by Croatia's sectoral composition, most notably by the importance of the tourism industry, and financed through external borrowing. The latter has produced Croatia's internal macroeconomic imbalances exhibited through the higher significance of imports relative to exports, thus, leading to a country's trade deficit. Consequently, as noted in Figure 9, rising household and corporate borrowing rendered the mounting gross external debt simultaneously with the capital account surplus. In contrast to Slovenia, this increase has also generated Croatia's trade deficit (Figure 5). In part, Croatia's trade deficit was due to the inadequate exchange rate policy. This lacking policy has failed to stimulate the country's exports and hindered its imports adequately. During the first expansion, Croatia's economic growth relied on external borrowing to a larger extent than Slovenia's, whose growth was primarily export-driven. Inasmuch, due to the external borrowing of the private sector, Croatia's economic growth lasted a year longer relative to Slovenia's. More importantly, the case of Slovenia and Croatia clearly show that the external borrowing possibilities were not the consequence of the Eurozone membership.

As depicted in Figure 9, Slovenia has undergone a capital account cash outflow during the second expansionary phase, followed by the 2009 reduction in the

corporate-private sector debt. This state arose as a result of various economic policies in Slovenia. These were, as was mentioned, related to the policies of the EU and the Eurozone. The deleveraging of Slovenia's private sector lasted until 2016. Slovenia's economic growth was based on exports, which, alongside the non-intensive growth of imports, has led to a positive trade balance and a negative capital account. In Croatia, private sector debt was on a decreasing trajectory from 2011 to 2017. From this perspective, the private sector deleveraging process can be related to the country's negative capital account from 2011 to 2015. This research suggests the following explanation when coupled with the export, import, and exchange rate movements (Figure 5). The 2014 record-high HRK/EUR exchange rate of 7.63 (tied with the 2000 value) has had a dampening effect on imports analogously with a positive impact on exports. Fostered by the increasing European demand for Croatian commodities, the consequential surplus trade balance (2015-2017) was made possible regardless of the negative capital account and overall external debt repayment.

The research has led to the stylized fact evident in the argument that Slovenia's first expansion was stimulated by exports, which were the key driver in the situation where Slovenia's economy has already been in a state of balance. Because of this and regardless of the export-led economic growth financed through external borrowing (mainly by the private sector in 2007), the preservation of a balanced government budget and trade balance was enabled. On the other hand, Croatia's first expansion occurred during an unbalanced state, in which investments and savings were the principal vehicles of growth. Croatia's borrowing was due to investments and savings that caused an internal imbalance. Economic growth and exports depended on investments, a logical consequence of the sectoral structure. Imbalances caused by investments manifested themselves in a negative trade balance. Relatedly, the exports relied on investments and savings within the domestic market. This has created favourable conditions that enabled the economic growth of foreign markets concurrently with a gradual increase in Croatia's borrowing, resulting in an increasing imbalance of the government budget and trade. Hence, Slovenian growth was dictated by exports and Croatia's by investments, linked to foreign borrowing. However, the exports did not deepen the macroeconomic imbalances in Slovenia, whereas the investments did affect Croatia's internal imbalances through the balance of payments.

Similarly, the second expansion in Slovenia was triggered by the strong impact of the exports. The rapid GDP growth and increased budget revenues generated revenues for eliminating budget deficits and creating trade surpluses. Hence, it is safe to conclude that economic growth occurred simultaneously with Slovenia's debt repayment arrangements and was determined by the rising exports. During this period, Croatia's growth was also linked to the deleveraging of the private sector. Croatia's growth has led to an increase in budget revenues and has eliminated the government budget deficit. The private sector's debt repayment was carried out by restoring the trade balance and public sector borrowing. Moreover, public-sector borrowing positively influenced investments and GDP growth.

Regardless of the country, the borrowing practices and possibilities were predominantly conditioned by exogenous factors and circumstances in foreign capital

markets. That having been said, joining the Eurozone caused a twofold (positive and negative) effect on Slovenia's external borrowing, which was more flexible in accessing foreign capital than Croatia.

## 5. Discussion and conclusion

The theoretical starting points backed by the empirical and institutional cross-country analysis beget important conclusions regarding Slovenia and Croatia's macroeconomic performance. These are derived by encompassing different institutional arrangements within the countries experiencing the significant influence of a pronounced cycle. Regardless of the geographical coverage, the presented findings are more general in their scope and are particularly insightful for investigating the policy limitations of countries with different levels of EU integration.

This research demonstrated that the cross-country integrational interlinkage emerging from the trade, other economic, and financial ties with the inner-European and global relations has a higher bearing relative to the common currency implementation. The lessons learnt indicate that country size has enormous relevance concerning cyclical macroeconomic outcomes. In Croatia, internal elements of effective demand were an essential determinant of economic growth. In contrast, Slovenia was much more dependent on external elements, i.e., exports. The analysis reveals that the size of the national economy is a more critical determinant of a country's performance than its Eurozone membership status. The larger the size of a country, the stronger its dependence on internal macroeconomic conditions (effective domestic demand elements) and lesser export dependency. This is due to the role of exports and the strength of their impact on a country's economic output.

The comparison between Slovenia and Croatia confirms that the common currency acts as an amplifier and that Eurozone's membership gives rise to greater integration into the international trade regime. The price developments across countries were very similar throughout the analysed cycle. Hence, it can be inferred that the introduction of the euro has neither increased volatility nor facilitated stability in aggregate price movements, i.e., the comparison between price level dynamics cannot confirm that the adoption of the euro translates into significant inflationary effects. This is to say that the broader foreign influences were decisive regarding price formation within an individual country. However, the specific measures advanced by the national economic policies did affect deviations between national and global price levels.

This study cannot presume that the Eurozone membership causes increased fluctuations in the national performance. The analysis shows that cyclical variability can be meaningfully prescribed to the common currency. It is confirmed that the European Central Bank's monetary policy can be more destructive than the flawed national arrangements. The case of Slovenia is a prime example showing that the rigid requirements dictated by the Eurozone's monetary authorities can cause harm on the individual member states. The Eurozone's membership has substantially influenced the various national policies exhibited by fiscal authorities. The current research has demonstrated that the Eurozone and EU countries do not effectively preserve their autonomy concerning fiscal policy implementation. Hence, the Slovenian fiscal



policies were not modified to tackle national issues but were designed to comply with the general recommendations of the EU. At the same time, the example of Croatia confirms that the detrimental effects of monetary policy, specifically exchange rate policy, can also occur if the independent national monetary authorities adopt them.

Comparisons of Slovenia and Croatia's external borrowing practices exhibit the importance of the external borrowing opportunities made possible by European integration. The private sector has better access to credit sources and borrows more easily if the country belongs to the European Monetary System. Furthermore, the national external borrowing capacities also depend on the internal factors of economic growth.

The empirical investigation of Slovenia and Croatia's fails to provide grounds for concluding that the Eurozone membership generates macroeconomic stability in the period of the pronounced economic cycle. Consequently, the current research rejects the initial hypothesis posed. The data show that the global economic cycle, whose scope did not originate in and transcended European countries, led to comparable cyclical patterns in both analysed countries and the Eurozone. Inasmuch, the impact of cyclical fluctuations pointed out that there is no readily apparent difference in economic performance between the Eurozone and EU countries. This suggests that the shared economic developments and the common European institutional setting proved unsuccessful in preventing the detrimental effects of the global crisis.

The initial hypothesis's rejection needs to be considered if the dynamics of national economies are observed and compared over time. Over time, accession and continued membership of the Eurozone increases individual economies' susceptibility to conditions in the Eurozone and its broader economic area. Eurozone membership over time leads to three processes observed throughout the analysis. These are the growing export ties within the Eurozone, improved access to foreign debt funds, particularly for the private sector, and greater dependence on the general economic situation in the Eurozone. All these developments reduce the importance of the individual national economy's size in determining its macroeconomic performance.

These processes justify a country's Eurozone membership as they spur additional effective demand in other Eurozone countries and, thus, opportunities for economic growth. At the same time, on the supply side, they enable easier access, especially for the private sector, to financial resources for financing investments and, consequently, long-term growth. However, Eurozone membership cannot protect the national economies from the effects of the world economy.

The second hypothesis, according to which conditions that enable countries to retain monetary sovereignty and execute fiscal policies with fewer restrictions allow them to implement more tailor-made adjustments, improving their macroeconomic performance, cannot be confirmed. It is essential to realize that, given the restrictions posed by the Eurozone membership, the countries that have maintained only fiscal policy cannot be managed entirely autonomously. The latter is because the restrictions for fiscal policy are often linked to the execution of monetary policy. In practice, the Eurozone membership severely restricts available economic policy responses aimed at improving countries' macroeconomic performance. This is why the freedoms of EU countries outside of the euro area are significantly higher concerning the conduct of economic policies relative to Eurozone countries.

The present analysis shows that the role of national economic policies in Eurozone countries is further strengthened within the larger countries, which are less dependent on international influences. National economic policies can also pose barriers to greater integration of individual nations into the global economic area through exports, thereby reducing the possibility of faster export-driven economic growth. This aspect also partly limits fiscal policy options in non-Eurozone EU countries. In such countries, fiscal policies targeted at general government revenue generation are highly dependent on external factors. At the same time, the government's ability to incur debt constrained those policies aimed at expenditures. In contrast, debt access is linked to each country's integration into the euro area. The less the country is involved, the more it has trouble borrowing abroad to pursue ambitious fiscal policies.

Countries outside the euro area are notably less limited in the implementation of monetary policy, in particular exchange rate policy. The greater importance of monetary policy concerning fiscal policy means that national economic policies, coupled with all other macroeconomic factors, can impact national macroeconomic performance either positively or negatively. Therefore, national monetary policies must be as neutral as possible from the point of view of general economic developments. Furthermore, since faulty policy responses damage macroeconomic performance, these should not attempt to remedy the adverse effects of the broader economic environment. This conclusion also applies to fiscal policy, except that their restrictions are more apparent and often more robust than those of monetary policy.

Considering all abovementioned, this analysis confirms that the country's mandatory integration into the common currency area can be viewed both as an asset and a liability, subject to a wide array of factors. Whether or not the Eurozone's integrational benefits outweighs its costs, related to the loss of monetary sovereignty, depends entirely upon the macroeconomic objectives pursued by each country. Consequently, the subordination of the national economic policies to those placed forward by the Eurozone institutional setting can bring individual costs and benefits to the country in question. At the same time, their interplay determines the ultimate beneficiaries of the European integrational project.

This study furnishes a comprehensive overview of the Eurozone's cross-country influence on the cyclical aggregate performance of Slovenia and Croatia. As such, it is concerned with providing a general macroeconomic framework to be used as a starting point focused on improving the exposition's parameters to address more specific research questions in the future. As such, in addition to the data availability, the broad nature of the analysis poses limitations in its ability to tackle problems at their root cause. Regardless of this, due to the anticipated 2023 Eurozone's accession, this research is timely and can be used for further assessment and evaluation of Croatia's integrational trajectory. Furthermore, it shows that small and open economies must proactively advocate for their interests in the EU-wide negotiations concerning the implementation of unison cross-country fiscal and monetary rulebook bringing about the uneven benefits' distribution. Finally, this investigation offers a valuable point of departure relating to aligning macroeconomic expectations, adequately managing crisis periods, and designing effective policy responses in all CEE countries yet to adopt a common currency.

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