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The prospect of Intermarium integration in the light of consumption risk sharing

Abstract

Objectives: After the collapse of Communism in Central and Eastern Europe, the idea of joining a prosperous bloc, which would provide financial assistance, seemed an opportunity not to be missed. However, with the possibility of the funding drying up, and the initial feeling of euphoria fading, the alignment of CEE and Western Europe on values was put to a test. This gave way to discussions about alternatives to the EU. One of them is Intermarium. This paper examines the potential benefits Intermarium countries could attain in terms of consumption risk sharing.

Aims: The research takes an alternative approach to economic integration, concentrating on economic stability. In particular, it makes an empirical analysis of consumption risk sharing in Intermarium, as well as drawing a comparison with the EU and the euro zone core.

Research Design & Methods: The paper uses method of risk sharing assessment proposed by Kose et al. (2009) extended by the authors to accommodate panel data setting.

Findings: As the empirical results illustrate, the past integration between the old EU and its new member states weakened the Intermarium mechanisms of consumption insurance, especially in comparison to the euro zone countries.

Implications / Recommendations: The potential benefits of Intermarium fall short of the EU alternative.

Contribution / Value added: The paper presents the results of the first examination of the extension of risk sharing in Intermarium countries.

Article classification: research article

Keywords: Economic Integration, Risk-Sharing, European Union, Intermarium

JEL classification: F15, F22, F36, F41

Introduction

In the aftermath of the fall of Communism in Europe, Central and Eastern Europe (CEE) had to make a pivotal choice regarding its future. For most post-Soviet countries, joining the European Union seemed to be the most desirable option, which was supported by most scholars, politicians and the general public. As a result of years of negotiations, eleven post-Communist states were able to join the European integration bloc, while the remaining countries are still negotiating today.[1] In the early 2000s, the Intermarium countries, and the new member

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states, in particular were enthusiastic about the idea behind EU integration and the values it represented. This can be seen in public opinion polls carried out by the EU in 2004, just after the new member states joined the bloc. On average, the Intermarium countries that joined the EU in 2004 and 2007 were among the most optimistic about the EU and its future. The EU funding scheme has also been a significant contributor to that sense of optimism, as the financial aid allocated under the Cohesion and IPA funds could be spent on improving their disadvantaged economies.

However, in recent years there has been a shift in perception of the EU in CEE. For example, public opinion polls suggest that there is more distrust towards the European Union and less alignment when it comes to key policy issues, such as migration, in particular. Moreover, funding is expected to decrease, and its initial impact is wearing off. In addition, in the early 2000s, the policy makers of the new member states were praising the membership in the EU as a "dream becoming reality" (Kwaśniewski, 2004). Today, there are a few disputes between the new member states and the European Union that have to be settled in court. This is particularly striking, as the disputes are with Poland and Hungary, the two member states which were at the top of the list of "proud to be European" in 2004 polls.

These recent developments have given way to discussions about possible alternatives to the EU in CEE. One of them is Intermarium, a term developed in the Interwar period by Józef Piłsudski, which referred to the European countries between the Adriatic, the Baltic, and the Black seas. However, from the political science perspective, it is difficult to assess the likelihood of Intermarium integration, as there is no evidence to indicate that even the most skeptical member states of the European Union will leave the bloc. Therefore, the aim of this paper is to explore the economic feasibility of Intermarium. To accomplish that, this paper takes an alternative approach to economic integration, concentrating on economic stability, rather than standard GDP growth indicators, which is an overwhelmingly analysed subject in both theory and empirical research. In particular, it makes an empirical analysis of consumption risk sharing in Intermarium, as well as drawing a comparison with the European Union and the EU core. Consumption risk sharing is the ability of states to insure their consumption path against idiosyncratic shocks to national income. This paper examines the potential benefits of consumption insurance that Intermarium could attain by pursuing closer integration.

As the empirical results illustrate, the past integration between the old EU and its new member states weakened the Intermarium mechanisms of consumption insurance, especially in comparison to the euro zone core countries. At the same time, quantitative results demonstrate the extent of potential gains in terms of risk sharing by engaging in consequent stages of integration. Moreover, for new Member States the possibility of disintegration from the EU would be associated with a sharp decline in risk sharing with those countries, and the time span to achieve comparable results with the rest of the Intermarium countries would be rather extensive. Withdrawing from the EU would be a step away from developing mechanisms of international consumption insurance and a move to an uncertain future within the Intermarium block. All in all, as potential benefits of Intermarium are immanent, they still fall short of the EU alternative.

The rest of this paper is organised as follows. The first section outlines the background behind and the motivation for this paper. Section two describes the concept of risk sharing and gives a brief review of literature on the subject. The methodology is described in the third section, while the empirical results are reported in section four. The last section concludes this paper.

Background and Motivation

"Today our dream is becoming reality" – Aleksander Kwaśniewski (CNN, 2004).

In the early 2000s, this sense of excitement around the EU applied to all Intermarium countries.

The Czech President even claimed that "there is no alternative to European Union membership" (Klaus, 2009). The EU appeared to be road to affluence, stability and freedom.

In retrospect, it becomes clear that a few would agree with Jonathan Levy, who claimed that "CEE is surely taking a risk in blindly trusting its fate to the EU with no provision for alternative solutions" (Levy, 2007). Indeed, there was little space for alternative paths, many saw EU membership or the CIS (Community of Independent States) as the only two options available, and the West had something CEE had not seen in decades: prosperity.

The primary reasons for EU aspirations included the freedoms that come with it. Indeed, various scholars considered that after the collapse of Communism, CEE would reintegrate with the West to fully escape from the "tyrannical rule, an idiotic economic system and a ritualized ideology" (Beissinger, 2009) that Communism represented. According to Jack Snyder, in a text published in 1990, one of the most viable options for the CEE would be "to recruit reformist Eastern regimes into the West's already well-developed supra-national political order" (Snyder, 1990).

EU membership has also been supported by the general public in CEE. This paper has examined the EU public polls from 2004 among the Intermarium EU Member States (Latvia, Lithuania, Estonia, Poland, the Czech Republic, Hungary, Slovakia, and Slovenia) and candidate countries at the time (Croatia and Bulgaria). The polls show that the Intermarium states were among the most enthusiastic about the EU. For instance, 87% of Hungarians, 82% of Slovenians and 81% Poles claimed to take pride in being European (Eurobarometer 62), while the EU average at the time was 68%.

This enthusiasm was also fuelled by the EU funding scheme, and the economic prospects that came with it. This was particularly important, given that the economies of the newly-independent countries were lagging behind the EU core. Table 1 reflects the amounts of the Cohesion Fund that have been allocated to the Intermarium countries in the period of 2000–2006. As the table shows, most of the funding was spent on basic infrastructure development.

These numbers demonstrate that the Intermarium states which joined the EU in 2004 have received significant financial assistance from the Cohesion Fund. The EU core states have largely been the contributors thereto. It is important to note that this trend has continued throughout the 2010s and have continued in the 2014–2020 budget. In addition, Intermarium countries outside of the EU have also received financial aid as a part of the European Neighbourhood Policy (the ENP). For instance, in the period 2007–2013 ENP aid to Belarus amounted to €94.2 million, and €1005.5 million was allocated for Ukraine.

Given the data above, one can argue that the funding scheme significantly contributed to the feeling of euphoria around the EU. However, there is some strong evidence to suggest that the euphoria is fading, and the attitudes of CEE towards the EU have started to shift. An illustration of this is the same Eurobarometer poll taken in 2017, which showed some very different results from 2004. For instance, the polls showed that 56% of Czechs, 55% of Slovenians and 51% of Croats do not trust the EU (Eurobarometer 88).

Table 1. Cohesion Fund allocation to the Intermarium EU Member States, 2000–2006

Country	Total amount allocated	Share spent on Basic Infrastructure
Czech Republic	€ 1 100 869 907	99.9%
Estonia	€ 430 555 481	99.6%
Hungary	€ 1 478 658 566	98.6%
Latvia	€ 707 260 462	99.6%
Lithuania	€ 825 950 073	96.0%
Poland	€ 5 531 545 011	98.8%
Slovakia	€ 766 500 642	99.8%
Slovenia	€ 254 312 402	98.9%

Source: Final Report – ERDF and CF Regional Expenditure Contract No. 2008.

To contrast, the level of distrust in the Czech Republic in 2004 was 32%, in Slovenia it was at 28%, and the average for Intermarium was 28%, compared to 42.6% in 2017. While this does not suggest that these countries would be willing to leave the EU, it is a clear signal that the EU is no longer perceived as a "dream becoming reality".

To illustrate this point even further, this paper has also examined data from the Hungarian Századvég Foundation, which has been carrying out opinion polls in the EU Member States. In many areas the results of the foundation correspond to the Eurobarometer. For instance, on average, in Intermarium countries 15.6% have a negative perception of the EU, while 42.5% have a neutral perception of the EU. Moreover, in 2017 32% of people in Intermarium EU member states agreed with the statement that the European Union will not exist in ten years. This is a striking difference from the opinions in 2004 (Project 28, 2017).

Furthermore, in the same way that the funding scheme has been contributing to the enthusiasm around the EU, it may now be contributing to the changing attitudes towards the EU. The Cohesion Fund is aimed at aiding the less developed regions of the EU. This funding will reach its inevitable end – the member states on the receiving side will have to become contributors rather soon. At the moment, Intermarium EU Member States still remain in the list of countries that are below 75% EU GDP per capita but some parts of these states, for instance, Prague and the Mazowieckie province in Poland, are already on the list as more developed regions. It could be argued that due to the fading enthusiasm around EU membership, and the decrease in funding, the ideas of an alternative solution for CEE are gaining attention again.

In addition, it is worth mentioning that the marginal utility of the funds provided by the EU is decreasing. As shown in Table 1, most of the funding was going to basic infrastructure which is essential for every country. Now much of the Cohesion Fund is aimed at protecting the environment and promoting the "low-carbon economy in all sectors" (European Structural and Investment Funds 2014–2020). Although this is undoubtedly an utterly necessary initiative, it is still not great news for countries such as Poland, which relies heavily on coal-mining and the government of which rigorously defends the industry. One could suggest that this was another reason for a change of attitude towards the European Union.

Once the euphoria around the EU started losing its shine, new conflicts have appeared between the EU core and CEE. As mentioned above, political freedom and independence were among the reasons why post-Communist states wanted to join the bloc. Nowadays, however, some states even argue that they lost their political freedom and independence after joining the EU. The best example for this would be Poland, as in 2017 alone the EU wanted to launch two court cases against this Member State. The ruling party of Poland (PiS) started judiciary reforms which, they claim, would reduce corruption. These reforms are perceived as highly controversial in the EU, with commentators going as far as to claim that they are "an erosion of judicial independence" (Davies, 2017). The EU responded to this by invoking Article 7, under which a Member State in violation of EU policies can be striped of certain rights within the bloc (EU website, the Lisbon Treaty). The Polish government has expressed its frustration in response to these accusations, claiming that the EU's reaction was "unnecessary political pressure exerted by European institutions" (the Ministry of Foreign Affairs, 2017). This seems very distant from Poland that "has long been praised as a role model for its transition from communism" (Noack, 2017).

A similar situation can be seen in the neighbouring Czech Republic and Hungary, against which the EU has also launched legal action. This is connected to the recent refugee crisis. The EU refugee relocation scheme required Member States to accept their share of asylum seekers. The Czech Republic, Hungary and Poland refused to participate.

It is important to note that the three states all argued participation would result in terrorist attacks.

This leads to a significant issue that has been overlooked by the politicians in the early 2000s: the EU takes its values very seriously, and those values do not always correspond to the prevailing opinions in the Intermarium states. Tolerance towards other cultures is one of such values. The Intermarium states struggle with tolerance, as they are still mostly homogenous in this respect. To give an example, the UN Refugee Agency had to specifically urge Hungary to "refrain from policies and practices that promote intolerance, fear and fuel xenophobia against refugees and migrants" (UNHCR, 2015). Due to these attitudes the Czech Republic, Poland and Hungary did not comply with their refugee quotas, despite various threats and warnings from EU institutions. The most important implication of this is that the membership of the EU, which was once seen as extremely positive, is now causing major issues for the new member states.

This, in turn, brings us to another important point made by Jonathan Levy: "The EU, despite its great success, may be a fragile union resting on the assumption that members will at critical times rationally put aside national or parochial self-interest for the greater good of 'One Europe'" (Levy, 2007). While using the word 'fragile' to describe the EU might be a step too far, given the recent developments in the union (e.g. Brexit), one could argue that the bloc is not as united as it was in the early 2000s. This would primarily be because currently there is less alignment on common policies between EU Member States. To illustrate this, polls taken in 2017 suggest that 36% of people in Intermarium states in the EU say that they "Oppose a Common European Policy on Migration", while the EU28 average is 11 percentage points lower, at 25% (Eurobarometer 88).

Another major difference in values between the Intermarium countries and the Western European states is the way they view homosexuality and the legislation around it. Most Intermarium states prohibit same-sex unions, with only the Czech Republic, Croatia, Slovenia and Hungary allowing civil unions (Boffey, 2018). Historian Chodakiewicz argues that when it comes to "environmentalism, feminism and gay liberation", "only a portion of those ideologies are indigenous to the Intermarium" (Chodakiewicz, 2012). He takes a rather harsh stand on the issue claiming that these are "transplanted" to CEE (Chodakiewicz, 2012). This paper does not fully agree with that statement; nevertheless, there is more than enough evidence to state that Intermarium and the West are not on the same page when it comes to homosexuality.

To illustrate, during a Pride parade in Lithuania in 2013, people were throwing eggs at the participants. In Ukraine, the first ever Pride parade took place in 2013, after being cancelled the year before because of a group of skinheads that were threatening the participants of the march (BBC, 2013). At the same time, Serbia had banned the Pride parades for two years prior to that, as police claimed they could not guarantee security for the participants (McDonald-Gibson, 2013). A clear pattern of rejecting the premise of equal rights for homosexual partnerships can be observed here. It is still up for a debate whether this is due to the totalitarian Communist past of the Intermarium countries – and they would 'grow' into it as they develop in the direction of liberalism – or, as Chodakiewicz claims, these ideas are "imposed by fiat by visiting Western leftist or brought back home by the naïve beneficiaries of Western scholarships" (Chodakiewicz, 2012). However, it is clear that CEE attitudes towards homosexuality are not likely to change soon.

To conclude this section, CEE was very eager to join the European family after the collapse of Communism. However, this section shows that the vision of the member states of the economic union is not as aligned as it used to be. This has been illustrated by analysis of opinion polls, particularly in the case of the Czech Republic, Croatia and Slovenia, where more than 50% of people stated that they do not trust the European Union. This can be further seen in lack of agreement on common policy questions, such as migration or homosexuality. Decreases in funding further contribute to the fading enthusiasm towards

the EU in both the new member states and the ENP countries. At the moment, there is not enough evidence to suggest that any of the Intermarium EU Member States would be willing to leave the bloc. However, this change in attitudes makes an idea of Intermarium integration worth exploring.

Risk sharing

Economic debates over the consequences of economic integration date back to Adam Smith (1776), who described the benefits coming from international specialisation and more efficient use of resources. This debate is even more pronounced nowadays in the era of globalisation, and there is no better example of the outcomes of integration than contemporary Europe. Nevertheless, current debates still concentrate on the benefits of integration associated with economic efficiency: whether economic integration through the more efficient use of resources can bring about (temporarily or permanently) higher rates of real GDP or GDP per capita growth. What is often overlooked in the growing literate on economic integration is the second strand of potential gains, i.e. the possibility of consumption risk sharing.

International consumption risk sharing is defined as the ability of agents to diversify their portfolios in order to insure their consumption against the country specific shocks to their income (Canava & Ravn, 1996). The given definition, even though providing the general idea behind the consumption risk sharing, gives a rather limited view of the possibilities for consumption smoothing. Consumption risk sharing has both national and international dimension (Crucini, 1999), yet opening the economy greatly improves the chances for stabilising the consumption path. A given country being a member of the global community can improve it by tightening integration with its partners within a given arrangement. The nature of the arrangement, as well as its depth, will determine the ability of a given country to insure its consumption path. In other words, consumption risk sharing cannot be considered

independently of the stage of integration and its specific institutional arrangements.

Countries are able to engage in consumption risk sharing without signing any international agreements, but their ability to do that effectively is rather limited. Later in this article channels of risk sharing are described, along with the stages of integration that facilitate it. The first stage of economic integration is a free trade agreement or customs union, which enables free movement of goods. International trade is one of the channels for risk sharing (Cole & Obstfeld, 1991), and the principle of its mechanics can be described as follows. When an idiosyncratic negative shock hits a given country, its GDP, along with price levels, starts to decrease. The lower price levels make domestic goods more competitive relative to foreign goods. As a result, imports decline and exports start to increase. This mitigates the impact of the economic shock on GDP and facilitates consumption smoothing.[2]

The second stage of economic integration is economic union, where, in addition to free movement of commodities, the unhampered movement of factors of production is an integral part. Within an economic union two additional channels for international consumption risk sharing are available. The first is the labour movement channel. After a negative idiosyncratic shock, some of the labour force become unemployed. If the other countries within the economic union are experiencing relative prosperity, at least some of the unemployed can relocate to find work somewhere outside the country. In such instance the path of consumption per capita within the country becomes more stable. Eichengreen (1992) showed empirically that labour force migration is responsible for the lion's share of income consumption smoothing for states in the United States and provinces in Canada. The second channel available within an economic

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[2] Additionally, international trade contributes to tighter business cycle synchronisation. See Beck (2011, 2013, 2014, 2019a).

union works through capital markets. By buying and selling assets internationally, economic agents can diversify their portfolios. If the portfolios are diversified enough, idiosyncratic shocks are not entirely transferred to consumer income, thus providing consumption smoothing. In other words, with diversified portfolios, disposable income and consumption are no longer perfectly sensitive to changes in domestic income. As domestic incomes fall, the negative effect on consumption is compensated by an increase in the values of assets held abroad. This channel received the most attention in the contemporary economic literature (Lewis, 1996; Fratzscher & Imbs, 2009; Lewis & Liu, 2015). Rangvid et al. (2016) showed that capital market integration has been leading to an improvement in risk sharing, using data from the last 130 years, but Kose et al. (2009) demonstrate that only industrialised countries were beneficiaries. Nevertheless, the degree of risk sharing achieved through the capital market channel is strongly debated. Moreover, authors disaggregate this channel even further. Asdrubali et al. (1996), Asdrubali and Kim (2004), and Poncela et al. (2016) consider two different channels within the financial flows: capital markets and credit channel, and point that they might work as substitutes.

The third stage of economic integration involves the constituting of a monetary union. The creation of currency union leads to the elimination of exchange rate risk and promotes both international trade and capital mobility and financial integration. Without exchange rate risk economic agents can diversify their portfolios more effectively internationally, as one of the major components of overall risk has been eliminated. Effectively, consumption-smoothing possibilities are extended. Similarly, the elimination of exchange rate risk promotes trade (Frankel & Rose, 2002; Rose & Van Wincoop, 2001; Beck, 2017), and improves the effectiveness of trade channel in providing consumption insurance.

Finally, the last stage of integration considered in this paper is fiscal union. Consumption smoothing in a fiscal union works through either taxation and transfers or benefits. When GDP in one of the countries starts to decrease as a result of negative shocks, tax revenues in that country start to fall and, consequently, the shock is not entirely transferred to income. At the same time transfers (excluding unemployment benefits) in that country start to increase, restricting the fall in disposable income. Both of these mechanisms facilitate consumption smoothing. The European Union has not yet decided on the introduction of fiscal union, even though propositions such as that have been put forward. For instance, back in 2015 Emmanuel Macron claimed that if the idea of fiscal union is not pursued, the entire Eurozone structure runs a risk of being dismantled. After being elected President of France, Macron recently highlighted the need to move in the direction of fiscal federalism to the German chancellor Angela Merkel and stated that he "will undertake deep structural reforms" if Merkel agrees to take "modest steps in the direction of fiscal federalism" (Eichengreen, 2017). At this point in time, the idea seems far-fetched, particularly since Merkel lacks support within her coalition for this initiative. Still, the United States can serve as a great example of the fiscal union. Sala-I-Martin and Sachs (1991) estimated that a one-dollar shock to income in one of the states in the USA triggers a decline in taxes of about 34 cents, and at the same time increases federal transfers by 6 cents. In other words, federal system in the US reduces a one-dollar income shock to a 60 cent decrease in disposable income. Asdrubali et al., (1996) calculated that the federal channel reduces regional shocks by 13%. Even though the EU does not have fiscal federalism in place, Sorensen and Yosha (1998) argue that the federal governments of the individual countries have been quite effective in executive risk sharing through fiscal policy.

Methodology

In order to assess the degree of risk sharing between European countries first data regarding

real GDP and consumption was collected for 33 countries. The analysis was conducted within the three reference groups. The first group is made up of 14 Intermarium countries: Bulgaria, Bosnia and Herzegovina, Belarus, the Czech Republic, Estonia, Croatia, Hungary, Lithuania, Latvia, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia, and Ukraine. Twenty-eight European Union countries constitute the second group. The third group – the EU core – is formed from the countries that were the original 11 Eurozone members, i.e.: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxemburg, Netherlands, Portugal, and Spain. The choice the EU core was dictated by previous research that stressed the importance of it as a reference point (Beck 2019b; Beck and Stanek 2019). The data was collected from Penn World Table (Feenstra et al., 2015) and covers the period between 1991 and 2014, although analysis is performed for three consecutive sub-periods of equal length: 1991–1998, 1999–2006, and 2007–2014.

The data is transformed into the first difference of natural logarithms, so the time series under investigation include the growth rate of real GDP and consumption. Additionally, growth rates of real GDP and consumption are calculated for each of the three reference groups: Intermarium, the EU, and the EU core. Using the aforementioned data, the following equation is estimated:

$$(C_{it} - C_{Rt}) = \alpha + \beta(\underline{Y}_{it} - Y_{Rt}) + \varepsilon_{it}, \qquad (1)$$

where: i denotes country, t is time, R is reference group, C_{Rt} is growth rate of consumption of country i at time t, C_{Rt} is growth rate of consumption in the reference group, Y_{it} is growth rate of real GDP of country i at time t, Y_{Rt} is growth rate of real GDP of the reference group, and ε_{it} stands for error term. Expression $(C_{it} - C_{Rt})$ shows by how much the consumption growth rate of a given country at a given time differs from the growth rate of consumption of the reference group. By the same token $(Y_{it} - Y_{Rt})$ measures by how much the growth rate of real GDP of a given country

in a given year deviates from the growth rate of the reference group. In this setting co-efficient β shows how much of the country specific shock to income is translated to this country consumption. β takes values from 0 to 1, where 1 indicates that the entire shock to income is translated to consumption. On the other hand, if β takes the value of 0, that means that that country's consumption is completely insensitive to changes in income; in other words, the country is able to completely mitigate the effects of the income shock through the risk sharing mechanisms. Accordingly, the measure of risk sharing can be defined as:

$$RS = 1 - \beta, \qquad (2)$$

where the value of the measure informs what percentage of the country specific risk can be diversified away, by the mechanism described in section 2. In other words, RS measures the percentage of the country specific shock that is insured through the mechanisms of risk sharing. A value of 1 would indicate perfect risk sharing, while 0 indicates no risk sharing at all. Taking advantage of the panel structure of the employed data set equation one was estimated using pooled OLS, fixed effects, and random effects estimators. Along with estimation output interval of confidence were calculated, and the Wald test was used to test the hypothesis of $\beta = 0$ (perfect risk sharing) and $\beta = 1$ (no risk sharing).

Results

The descriptive statistics of the time series of real GDP and consumption growth are shown in table 2. The table illustrates the mean value of the growth rate, standard deviation, and co-efficient of variation calculated as the ratio of the standard deviation to mean. There are a couple of points that could be made about the time series at hand. Firstly, GDP growth rate is more volatile than consumption, regardless whether volatility is measured in terms of standard deviation or coefficient of variation. This suggests that risk sharing mechanisms are

Table 2. Descriptive statistics for real GDP and consumption growth rates for Intermarium countries, and the Intermarium and the European Union aggregates for the 1991–2014 period

Country/Group	GDP			Consumption		
	Mean	SD	CV	Mean	SD	CV
Belarus	1.51%	0.113	7.513	3.74%	0.078	2.076
Bosnia and Herzegovina	9.61%	0.165	1.714	6.16%	0.151	2.445
Bulgaria	0.66%	0.084	12.863	1.29%	0.088	6.783
Croatia	1.12%	0.073	6.501	0.82%	0.101	12.394
Czech Republic	1.49%	0.049	3.295	1.94%	0.061	3.162
Estonia	2.58%	0.088	3.395	2.36%	0.097	4.104
Hungary	2.27%	0.037	1.613	2.29%	0.038	1.644
Latvia	0.29%	0.104	35.413	−0.24%	0.160	−67.618
Lithuania	1.93%	0.078	4.049	2.79%	0.080	2.866
Montenegro	1.63%	0.144	8.797	1.72%	0.157	9.177
Poland	4.83%	0.029	0.605	5.38%	0.029	0.539
Romania	3.67%	0.053	1.456	3.61%	0.079	2.195
Serbia	2.09%	0.159	7.619	1.98%	0.156	7.886
Slovakia	1.83%	0.070	3.828	2.34%	0.089	3.817
Slovenia	2.16%	0.044	2.051	1.98%	0.052	2.616
Ukraine	−0.77%	0.106	−13.826	1.65%	0.117	7.094
Intermarium	2.07%	0.043	2.079	2.49%	0.066	2.643
Inermarium and the EU 28	2.48%	0.021	0.831	2.15%	0.025	0.872
The EU 28	2.61%	0.020	0.758	2.47%	0.020	0.813
The EU Core	2.60%	0.021	0.801	2.35%	0.020	0.842
Maximum	9.61%	0.165	35.413	6.16%	0.160	12.394
Minimum	−0.77%	0.029	−13.826	−0.24%	0.029	−67.618
Mean	2.30%	0.081	4.989	2.47%	0.090	0.261
Standard deviation	0.022	0.041	9.233	0.015	0.041	17.234

Source: own calculations.

at work to provide consumption smoothing. Secondly, growth rates of the aggregates, here for Intermarium, the aggregate of Intermarium and the EU, the EU and the EU core, are less volatile than growth rates of the analysed time series for individual countries. The only exception is Poland, which experienced an unprecedentedly stable period of growth over the investigated time span. This illustrates the potential benefits in terms of income and consumption smoothing attainable from participation in economic integration.

Table 3 presents the results of the estimation. Regardless of the utilised method of estimation, the results are very similar. Before the analysis of the β coefficients, a few comments on the results of the tests are due. 0.95 percent levels of confidence include the value of 1 for the Intermarium in the 2007–2014 period for all the methods of estimation. The Wald test, in that case, does not allow for the rejection of the no risk sharing hypothesis. This illustrates that the work of the risk sharing mechanisms between the Intermarium countries

Table 3. Estimation results for Intermarium, EU28 and EU core

Group	Time period	Estimator	β	Standard error	0.95 Confidence interval		p(Wald test)		R2	Adj. R2	DW
					L	U	H0: β = 1	H0: β = 0			
Intermarium	1991–1998	pooled	0.747****	0.053	0.642	0.851	0.000****	0.000****	0.614	0.611	2.225
		fixed	0.769****	0.068	0.634	0.905	0.001***	0.000****	0.645	0.567	2.363
		random	0.747****	0.053	0.642	0.851	0.000****	0.000****	0.614	0.611	2.225
	1999–2006	pooled	0.876****	0.071	0.737	1.016	0.079*	0.000****	0.551	0.547	1.943
		fixed	0.829****	0.073	0.684	0.973	0.019**	0.000****	0.660	0.584	2.418
		random	0.852****	0.068	0.717	0.987	0.030**	0.000****	0.553	0.550	2.140
	2007–2014	pooled	0.927****	0.077	0.774	1.080	0.343	0.000****	0.532	0.529	1.950
		fixed	0.935****	0.089	0.758	1.113	0.471	0.000****	0.590	0.499	1.967
		random	0.927****	0.077	0.774	1.080	0.343	0.000****	0.532	0.529	1.950
EU 28	1991–1998	pooled	0.915****	0.055	0.806	1.023	0.120	0.000****	0.556	0.554	2.169
		fixed	0.864****	0.069	0.728	1.000	0.049**	0.000****	0.608	0.535	2.225
		random	0.908****	0.055	0.799	1.016	0.092*	0.000****	0.552	0.550	2.160
	1999–2006	pooled	0.640****	0.051	0.539	0.742	0.000****	0.000****	0.410	0.408	1.620
		fixed	0.584****	0.053	0.479	0.690	0.000****	0.000****	0.576	0.497	2.043
		random	0.626****	0.050	0.527	0.726	0.000****	0.000****	0.410	0.407	1.766
	2007–2014	pooled	0.641****	0.051	0.540	0.742	0.000****	0.000****	0.412	0.410	2.004
		fixed	0.609****	0.057	0.496	0.722	0.000****	0.000****	0.515	0.424	2.122
		random	0.645****	0.051	0.545	0.745	0.000****	0.000****	0.422	0.419	1.984
EU core	1991–1998	pooled	0.521****	0.068	0.385	0.656	0.000****	0.000****	0.405	0.398	1.938
		fixed	0.565****	0.080	0.405	0.726	0.000****	0.000****	0.559	0.444	2.124
		random	0.527****	0.067	0.394	0.660	0.000****	0.000****	0.420	0.413	1.910
	1999–2006	pooled	0.418****	0.063	0.294	0.543	0.000****	0.000****	0.342	0.334	1.733
		fixed	0.283***	0.082	0.120	0.446	0.000****	0.001***	0.474	0.337	2.106
		random	0.417****	0.063	0.293	0.542	0.000****	0.000****	0.340	0.332	1.738
	2007–2014	pooled	0.232***	0.068	0.096	0.368	0.000****	0.000****	0.118	0.107	1.678
		fixed	0.215***	0.073	0.070	0.360	0.000****	0.003***	0.368	0.203	2.124
		random	0.214***	0.067	0.081	0.347	0.000****	0.001***	0.106	0.096	1.833

*, **, ***, and **** denotes result statistically significant at 0.1, 0.05, 0.01, and 0.001 level respectively. DW – Durbin-Watson statistic.

Source: own calculations.

was negligible in that period. Additionally, the hypothesis of no risk sharing cannot be rejected for some estimation methods for the Intermarium between 1999 and 2006, as well as for the EU between 1991 and 1998. Nonetheless, in those instances, evidence for negligible risk sharing is less unequivocal. At the other end, for 0.001 significance level, the hypothesis of perfect risk sharing cannot be rejected for the EU core between 2007 and 2014. Still, this is a rather unconventional and far-reaching significance level. For this reason, one can conclude that there is no perfect risk sharing, even between the EU core countries.

To summarise, the results show that the degree of risk sharing in all analysed groups was in between the two extremes. To assess accordingly the degree of risk sharing estimated β co-efficients were utilised to create RS measure defined in the formula (2). The values of the measure are shown in table 4. Estimates form pooled OLS were utilised. Yet the obtained results are qualitatively similar regardless of the method of estimation used.

Regarding the first column, in the period between 1991 and 1998 the Intermarium countries were able to insure against 25% of the shock to real GDP. However, in the two following periods the ability to insure against country specific shocks decreased in the 1999–2006 and 2007–2014 periods to 12% and 7%, respectively. The European Union countries were able to insure against 9% of the shocks to their GDP in the 1991–1998 period. Yet in the next two analysed periods, the risk sharing within this group had increased

to 36%. To explain the results, it is important to keep in mind that the Intermarium countries include a group of countries that have joined the EU and the countries that remained outside of that bloc. The Intermarium countries, due to the association with the Soviet Union in the 1990s, still shared strong common ties, which enabled them to share risk. However, as some of those countries joined the European Union, the ties between them and the rest of the Intermarium started collapsing. For those reasons, the degree of risk sharing between the Intermarium countries started declining.

On the other hand, at the beginning of the period the degree of integration between the last 14 European Union members and the rest of the EU was very limited. As the process of integration progressed the countries were able to improve the degree of risk sharing significantly. These results demonstrate that risk sharing goes *pari passu* with integration. An even better demonstration of that point is provided by the case of the EU core countries. Starting from the beginning of the analysed period the degree of risk sharing between them was the highest, as they were able to insure consumption against 48% of idiosyncratic shocks. This high degree of risk sharing should not be surprising, as the EU countries had been participating in European integration for many decades before Intermarium countries even started considering joining the European Community. As the integration progressed, the degree of the risk-sharing went up even further. The year 1999, with the introduction of the common currency and the following commencement of euro zone, opened a period where the core countries were able to insure their consumption paths against 58% of idiosyncratic risk. Finally, in the 2007–2014 period the euro zone countries were able to insure against 77% of country specific shocks. This impressive number is the best testament to the potential of economic integration in promoting risk sharing. Moreover, it demonstrates the power of monetary unions in facilitating consumption smoothing. It is also important to remember that this was accomplished without resorting to fiscal

Table 4. Measures of risk sharing obtained with pooled OLS estimator (in %)

Time period	Intermarium	EU 28	EU Core
1991–1998	25	9	48
1999–2006	12	36	58
2007–2014	7	36	77

Source: own calculation.

union, which suggests that there is still room for improvement.

Conclusions

This paper has analysed the group of countries that comprise Intermarium from two different perspectives: it has looked into motivations for exploring the idea of Intermarium integration and also assessed the potential economic benefits of that through the prism of consumption risk sharing. In the early 2000s, there was a strong sense of enthusiasm when it came to the EU membership. However, as it has been illustrated, there is enough evidence to suggest that there has been a shift in attitudes towards the EU in CEE. To give a few examples, opinion polls show a lack of trust towards the European Union, as well as less alignment on key policy issues, such as migration. In addition, EU financial aid for both groups has either decreased or is expected to decrease. This, in turn, has shattered the thought of the European Union as the only feasible idea for the post-Communist states, which gave room for exploring alternative ideas, such as Intermarium. However, it is important to note that, from the political science perspective, it is difficult to assess the likelihood of the Intermarium integration, as there is no evidence to indicate that even the most sceptical EU Member States would leave the bloc. At the same time, given the shift in attitudes, the economic benefits of Intermarium are nonetheless worth exploring.

The research undertaken in this article did not concentrate on gains in terms of improved economic growth, which is overwhelmingly explored in the literature, and instead focused on consumption risk sharing. As both existing theoretical models and empirical research demonstrated, ability to ensure the stability of consumption path heavily relies upon the stage of integration attained by the group of countries under investigation. Therefore, an inquiry was conducted for the Intermarium, the EU, and the EU core. At the outset the results showed that aggregates are characterised by the lower

volatility of both consumption and real GDP growth, signifying advantages associated with membership in supranational organisations. Moreover, as the volatility of consumption is lower in comparison with GDP growth at a country level, there is evidence of risk sharing mechanisms working even in preliminary data analysis. The main part of the research showed how the degree of consumption risk sharing was evolving from period to period in the groups under scrutiny. The results showed that risk sharing between Intermarium countries was steadily declining, while at the same time it increased among European Union Member States. This outcome can be attributed to the fact that Intermarium includes both the EU and non-EU member states. At the beginning of the analysed period Intermarium countries were through common post-communist ties able to insure against 25% of idiosyncratic shocks to national GDP. However, as some of the Intermarium countries joined the EU the ties with rest started to loosen. Consequently, the decrease in Intermarium risk sharing was accompanied by development of the European Union risk sharing along the described stages of integration. At the same time, the EU core countries were characterised by the highest degree of consumption insurance at the beginning of the sample period and were able to increase it tremendously, with 77% of shocks to national income being absorbed through the mechanisms of risk-sharing. This impressive result can be traced to the introduction of the common currency and concomitant financial market integration. Even this result could be improved upon if the EU core moved on to another stage and decided to form a fiscal union.

To sum up, the results show that ongoing European integration relaxed the ties between the Intermarium countries and deteriorated, almost completely, their mechanisms of international consumption insurance. This decline was accompanied by an increase in risk sharing between the old and new member states of the European Union. As demonstrated by the example of the EU core, the scope of benefits in terms of risk

sharing that could be gained through engagement in consequent stages of integration is tremendous. Nevertheless, in the light of the results presented in this paper, integration in the Intermarium bloc would be associated mostly with costs on the side of the countries that are already part of the EU. Leaving the EU would be associated with a sharp decline in risk sharing with those countries, and the time span to achieve comparable results with the rest of Intermarium countries would be rather extensive. Withdrawing from the EU would be a step away from developing mechanisms of international consumption insurance and a move to an uncertain future within the Intermarium bloc. The most rational choice, motivated on both theoretical and empirical grounds, would entail non-EU Intermarium countries joining the European Union. With increased possibilities to insure against idiosyncratic shocks, the benefits of ongoing integration would be reaped by both the existing and new members of the European Union.

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