

AN EXPERT FORECAST FOR EXPECTED BOND YIELD SPREADS AND MACROECONOMIC FUNDAMENTALS

ЭКСПЕРТНЫЙ ПРОГНОЗ ОЖИДАЕМОЙ ДОХОДНОСТИ ОБЛИГАЦИЙ И МАКРОЭКОНОМИЧЕСКИХ ПОКАЗАТЕЛЕЙ

Аннотация. На сегодняшний день одним из самых заметных явлений в экономической жизни России является быстрое развитие внешнеэкономической деятельности. Создание рыночной экономики обеспечивает ее открытостью и интеграцией в мировую экономику. Кроме того, стратегическое значение внешней торговли для России в связи с тем, что модернизация экономики, привлечение крупных иностранных инвестиций, новых технологий возможны лишь при условии формирования в стране устойчивой, ориентированной на внешний мир экономической системы, а так же органическое включение России в глобальном разделении труда.

В современных условиях непредсказуемых колебаний валютных курсов на любые потери или выигрыши для предприятия в международных экономических операциях, управление валютным риском отечественных предприятий-участников внешнеэкономической деятельности и экспертные предсказания различных факторов становятся все более важными.

Таким образом, хотя валютный риск относится к внешним (по отношению к другим факторам, которые имеют место возникать внутри дела), предприятия должны иметь свои методы управления рисками и сокращения их уровня до оптимального (приемлемого) значения.

Одними из наиболее популярных инструментов для хеджирования валютных рисков, не только иностранных, но и отечественных предприятий, являются так называемые контрактные методы.

В данной статье рассматриваются некоторые экспертные прогнозы макроэкономических фундаментальных показателей и ожидаемые доходности облигаций, а так же их связь с международной торговой деятельностью и ставкой валютного курса.

Ключевые слова: валютный риск, иностранная валюта, курс валют, валютный курс, государственное регулирование, внешнеэкономическая деятельность, международный бизнес, контракты своп, экспертный прогноз.

Abstract. For today one of the most noticeable phenomena in the economic life of Russia is the rapid development of foreign economic activity. The establishment of a market economy provides for its openness and integration into the world economy. In addition, the strategic importance of foreign trade for Russia due to the fact that modernization of economy, attracting large-scale foreign investment, new technologies are possible only under condition of formation in the country sustainable, outward-looking economic system, organic inclusion of Russia in the global division of labor.

In the modern context of unpredictable fluctuations in currency exchange rates on any losses or winnings for enterprise in international economic transactions. The currency risk management of domestic enterprises-participants of foreign trade activities and different factors expert predictions become increasingly important.

So, although currency risk refers to the external (in relation to the factors that give rise to), businesses can and should have in their Arsenal reduction methods and reduce the level of risk to an optimum (acceptable) value.

One of the most popular instruments for the hedging of currency risks, are not only foreign but also domestic enterprises, are so-called contract methods.

This article deals with some expected bond yield spreads and macroeconomic fundamental expert forecast and their relation with international trade activities and foreign currency exchange rate entities.

Keywords: exchange rate risk, foreign currency, exchange rates, monetary exchange rate, government regulation, foreign economic activity, international business, swap contracts, expert forecast.

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¹ Харфуш Ильяна – студент магистратуры. Кафедра Национальной Экономики, экономический факультет, Российский Университет Дружбы Народов. Москва, Россия.

Harfoush Ilyana – graduate student. The Department of National Economy, Department of Economics, Russian University of Peoples' Friendship. Moscow, Russia.

In the global economy in 2016 was observed the countries, while others, especially emerging market and improvement of the economic situation in some developing countries, was embarrassed because of falling

prices for commodities and tighter financial conditions.

In 2015, the IMF saw a number of major changes: the US Congress passed a quota reform of 2010, and the Renminbi, China's currency, was added to the official basket of currencies the IMF.

As for personnel, the Foundation welcomed a new chief economist of the Maury Obstfeld, who previously headed the Department of Economics at the University of California at Berkeley. In September he joined the IMF from the Council of economic advisers under the President of the United States to replace Olivier Blanchard to the position of economic counselor of the IMF and Director of the Research Department of the IMF.

The US economy continued active growth and the process of creating jobs, whereas in Europe overall, there has been increasing economic activity, and the situation in Japan remains uncertain. But with some exceptions (e.g. India) in emerging market and developing countries continued slowdown in the decline in commodity prices and tightening financial conditions, and synchronized and steady growth of the world economy remained elusive.

In some countries, these very General trends superimposed political or geopolitical tensions, which reinforces the purely economic problems. The consequences of the manifestations of this tension in 2016 are one of the main factors determining regional and global macroeconomic outcomes. However, I would like to note with satisfaction that at the end of 2015, came good news for the international monetary system: the US Congress finally approved the IMF quota reform, originally adopted in 2010. In several ways this change will strengthen the capacity of the IMF to respond to future financial stability, whatever they were.

China will remain among the first in the list of such issues. Growth in China is slowing, as the economy transitions away from investment and productive activities to consumption and services. But the global spillover effects from the slowdown in China acting through the reduction of its import and a decrease in demand for commodities, were much more significant than expected. Major challenges remain for reorientation related to the weakness of balance sheets of state enterprises, financial markets, and also to the overall flexibility and efficiency of resource allocation. Growth below the official targets of the authorities, once again, frighten the world's financial markets, however, the old ways of performance gain targets can only prolong the existence of economic imbalances, with the subsequent problems.

What else should we pay attention to? The crisis of refugees fleeing Iraq and Syria, creates a difficult task for the potential of the EU countries in terms of admission of migrants for labor markets, but to an even greater extent for political systems. The project is a joint perimeter security of the EU and the associated controversy regarding the free movement of people within Europe deserve attention. But we must not forget that countries such as Lebanon, Jordan and Turkey are at the forefront of the refugee crisis. In addition to the problems of refugees,

Europe faces other political and economic constraints – from the Iberian Peninsula to Greece and Ukraine.

Climate changes and the struggle for the control of emissions of CO₂ represent a gradually unfolding crisis, which is dangerous to ignore. The agreement in Paris at the 21st Conference of parties to the Convention was a triumph for international cooperation. In 2016, we see how different countries react, and get a first idea of whether this helps agreement of effective international cooperation.

And finally, this is international trade, which in recent years experienced difficulties as the growth of world trade relative to GDP growth slowed down. If a comprehensive multilateral trade agreements are no longer the subject of negotiations, whether trade liberalization can continue effectively on a more limited scale?

2016 was full of challenges, but the emerging markets were indeed the center of attention. Capital inflows decreased, the part of the reserves spent, sovereign spreads increased, the national currency has weakened, and in some countries, dramatically decreased the growth rate. The declining rates have proved extremely useful tool to mitigate the various economic shocks. However, a further sharp drop in the price of commodities, including energy, caused even greater problems for exporters, including a more rapid decline in currency exchange rates, which may cause as yet hidden vulnerabilities in the balance sheets or to spur inflation.

The mood in the financial markets in 2016 are gloomy, the markets prone to high volatility, despite continued easing by the European Central Bank and the Bank of Japan. Of course, the Federal reserve began in December 2015, as it believes, to a gradual cycle of interest rate hikes. It will be extremely important as the fed will spend the next interest rate hike in 2017 and how it will interact with the market (at the end of 2015 this objective, apparently, was to run in the right way). But there is no doubt that condition in global financial markets tightened, and emerging market and developing countries are particularly sensitive to the effects of these measures, given their other current difficulties.

Emerging market and developing countries should be more active and targeted research. In 1980-ies the share of this group of countries accounted for about 36 percent of global GDP (measured at purchasing power parity, or PPP) and approximately 43 percent increase in world GDP (PPP weights). In 2010-2015, these figures, respectively, was 56 percent and 79 percent. Therefore, the approach to the study of the world economy mainly taking into account the prospects of the advanced economies becomes even more obsolete. This program of research on emerging market economies and developing countries include the traditional issues of balance of payments – capital flows and their management, foreign exchange intervention, vulnerabilities in the balance sheets, the determinants of current account balances, especially trade and trade volumes.

But there are a lot of additional questions. What policies

and policy frameworks contribute to increasing potential production and rate of growth? As noted in past issues of "prospects of development of world economy", the growth of potential GDP appears to have slowed in all countries of the world, but the reasons for this are not well understood. In this regard, it is necessary to consider the structural reforms in the advanced economies.

Trends in inequality also require attention. Despite the significant global convergence of national incomes per capita, this should not necessarily more equitable distribution of income within countries. This inequality affects the overall economic performance (for example, through the results in the form of health status) and on the political acceptability of policy measures conducive to the development of the market. How can we ensure that growth does have a much wider, and how this, in turn, can contribute to higher growth.

In addition to these longer-term issues of growth and distribution, there are many issues of economic stability that require attention. For example, for different countries overall priority topical area of research is the integration of the financial sector in the basis of macroeconomic policy.

The international monetary system was much easier at the initial stage of the Bretton woods system, when the critical issues were limited to exchange rate adjustments and the balance of payments. In today's world is closely related, but still separate, national capital markets, the problems became more complex. For example, now occupy a leading place in the questions about the relationship between the exchange rate regime and financial stability, which will remain the subject of intensive research in the IMF.

The global financial crisis fallout significantly unsettled European sovereign bond markets. Bond spreads jumped during the crisis mainly on the back of a deteriorating outlook for public finances, worsening macro-economic conditions, and rising international risk aversion. Views diverge over the importance of these drivers of sovereign bond market turbulence. One interpretation is that markets paid little attention to fiscal and economic fundamentals before the crisis in the European Monetary Union (EMU), and thus spreads were excessively low. With the deterioration of the fiscal and economic outlook during the crisis, bond investors rediscovered the role of those fundamentals.

Another interpretation is that risk is mostly driven by market sentiment and as such independent of the underlying expected fundamentals. Thus, uncertainty about policy outcomes could make investors sell sovereign bonds out of fear and lead to a mispricing in bond markets. Each of these views carries a different policy prescription. Under the former view, fiscal consolidation and improved economic conditions are necessary steps in curbing bond spreads. Under the latter view, bond market reactions may be difficult to predict as they are fueled by sentiment and instincts, therefore pursuing virtuous macroeconomic policies may be insufficient to reduce spreads.

Some papers attribute a role to the sovereign's fiscal position

in determining realized bond spreads, i. e., the actual spreads observed in bond markets. However, other studies fail to find fiscal variables among the main determinants of bond spreads for advanced economies. Conversely, they highlight that bond yield spreads are increasingly driven by international factors that reflect global investor risk aversion. As they look into the reaction of realized spreads to realized fundamentals, however, most of those studies do not treat expectations explicitly.

More recently, it was suggested directly relating realized sovereign spreads to proxies of expectations on fiscal and other macro developments. The main idea behind this approach is that market prices incorporate the expectations of the future path of fiscal and economic fundamentals, rather than their current or past values. In this context, future implicit or explicit liabilities, such as the size of bank rescue packages and the position of the domestic banking sector, are often found to explain developments in government bond spreads. Dataset to investigate the time-varying relationship between realized sovereign bond spreads of the G7 countries and expectations about fiscal and other macroeconomic fundamentals. Their results show that fundamentals and general risk aversion were downplayed in the years preceding the global financial crisis, but an overpricing of the same factors occurred during the European sovereign debt crisis. Yet, this strand of the literature does not investigate how experts' forecasts about future bond yield differentials react to changes in their perception of future macroeconomic and fiscal developments.

Indeed, which variables underline the individual experts' forecast of sovereign spreads is still unknown in the literature. In particular, it is not clear whether forecasting experts value predominantly expected fundamental or non-fundamental factors in their projections. In addition, the relative weight of each specific expected fundamental factor in predicting spreads is also not known. This paper addresses both unknowns. First, we test the importance of expected macroeconomic fundamentals as well as a global risk factor in the forecast of sovereign spreads. Second, we estimate the contribution of three key expected fundamentals – i. e., the overall fiscal balance, defined as general government primary balance plus interest payments (hereafter simply referred to as 'fiscal balance'), GDP growth, and CPI inflation – in shaping the forecasted spreads.

Addressing these two unknowns is important because they shed light on how expectations about future sovereign spreads are formed, which is directly related to the need to anchor market expectations on fiscal policy and sovereign risk. Indeed, according to a recent literature, credibly anchoring the market's fiscal expectations can significantly improve the effectiveness of macroeconomic policies.

Understanding how spread forecasts are shaped is further important because realized observations for financial variables – including bond spreads – do not necessarily reflect expectations about future fiscal and macroeconomic conditions in the same way as future (expected) financial variables. In fact, fundamentals are often found to play an important

role in explaining the long-run predictability of financial variables and exchange rates, but generally have little power in accounting for current market developments. In addition, a vast finance literature has shown that other factors – including high frequency news and “irregular” trading behaviors (e. g., bandwagon effect, excess speculation, and major trading manipulation) – are important in explaining the short-term dynamics of financial variables and exchange rates; whereas their role is less clear in explaining the medium or long-term forecasts of the same variables.

Overall, this literature suggests that fundamentals should affect the expectations and realizations of financial variables (including sovereign spreads) in substantially different ways.

In this article, therefore, uses a regression-based methodology to analyze the role of expected fundamentals in determining spread forecasts. This econometric approach appears to be the most appropriate when the underlying forecast model is not observed. Moreover, the other alternative of directly inquiring about such differences via a survey to sovereign bond traders would be rather difficult to implement and would not deliver the same number of observations, high frequency data and degrees of freedom that our approach does.

This empirical analysis employs the CE survey-based monthly dataset of individual forecasters. The CE survey primarily includes forecasting experts from financial institutions and (private&public) research centers. We focus on France, Italy, and the U.K., and use a period sample from January 1993 until October 2014, which includes a substantial part of the recent financial crisis. Using GMM methods to address possible reverse causality issues, we estimate whether market experts’ projections for the fiscal balance, GDP growth and CPI inflation – as well as a global risk factor – play a significant role in explaining their forecast of the government bond spreads.

The main finding here is that the projections of fiscal and other macroeconomic fundamentals significantly explain the one-year-ahead expectations of the French, Italian and U. K. sovereign spreads over Germany. In particular, an improvement in the one-year-ahead projected fiscal outlook reduces expected spreads. This is especially the case for the Italian spread: a 1 percent rise in the expected surplus ratio to GDP reduces forecasted spreads by around 38 basis points; whereas the effect is smaller – but still significant – for the French and British spreads. The projected fiscal balance and real GDP growth have a substantially larger effect on the expectations of future government spreads compared to regressions based on realized spreads.

The results also show that, until the recent financial crisis, a weaker growth outlook was associated with a reduction in forecasted spreads. This might reflect a flattening of the yield curve in bad economic times due to the expectation of easier monetary policy. Nevertheless, this relationship is reversed for Italian spreads during the financial crisis. In this period, expectations of higher growth considerably reduced the expected Italian 10-year bond spread, suggesting that markets

perceive future growth as crucial to the future sustainability of public finance.

The fiscal limit can be described as the point at which the government no longer has the ability and willingness to increase its borrowing capacity through changes in tax policy. Its importance also depends on whether a country controls its own monetary policy. For example, as part of the EMU, France and Italy delegate the control of their own monetary policy to the European Central Bank (ECB). Hence, for those two countries, the domestic nominal government debt becomes effectively equivalent to real debt and must be backed by real surpluses. For this reason, as those countries’ debt levels approach their fiscal limits, their sovereign yields and spreads should react more strongly. On the other hand, the U. K. controls its own monetary policy and issues nominal bonds, which are a claim to pounds in the future. Therefore, in the event of a very severe crisis that puts the sustainability of public finances at risk, it is more likely that the British authorities would tolerate a deviation from the Bank of England’s inflation target rather than a default on government debt. For these reasons, the fiscal limit is expected to be less binding than in France and Italy.

Consensus Economics data is used here to investigate the relationship between the projections of macroeconomic fundamentals and of sovereign bond spreads. CE conducts a survey – mainly based on OECD countries – among professional economists working for commercial or investment banks, government agencies, research centers and university departments. Most of the surveyed experts provide forecasts for their own country only. However, there are also a few experts working for international financial institutions or research institutes that provide forecasts for several countries simultaneously. The survey queries respondents every first week of each month about current and future developments for a number of macroeconomic and financial variables, including the yields on 10-year benchmark government bonds. The forecasts are then published early in the second week of the same month.

Unlike other surveys, individual forecasts in CE should not suffer a bias owing to the release of strategic forecasts, as often happens for official projections released by governmental agencies. In addition, evidence shows that CE forecasts are less biased and more accurate than forecasts of some international institutions.

CE data is public, which help to prevent a participant from reproducing others’ forecasts and also limits the possibility of herding. Moreover, forecasters are bound in their survey answers by their recommendations to their clients, and discrepancies between the survey and their private recommendation would be hard to justify. Overall, we can reasonably argue that the CE survey data broadly reflects the spectrum of expectations of market experts.

Focusing on Italy, France and the U. K., with data covering the period from January 1993 to October 2014. Apart from Germany, these are the only European Union countries for

which fiscal forecasts are reported in the CE survey for a long time span. Including the U.K. has two main advantages. First, it allows us to study a non-euro area country, observing how the results for this country may differ from countries belonging to the EMU.

Second, the CE survey includes many observations for the U.K., which allows to significantly expand this dataset. In fact, despite the gradual expansion of the dataset, fiscal forecasts have not always received the same attention from forecasters over time. Some forecasters stopped producing projections for the fiscal balance, while others that were initially included left the sample owing to closures, mergers or other reasons. Moreover, new forecasters joined the CE survey only at a later stage. Therefore, we apply a double criterion to select our sample. First, we do not consider those forecasters that have participated for fewer than 12 consecutive months in the CE survey. Second, among those forecasters, we select only those with no gaps between two consecutive forecasts that are larger than 36 months. This reduces the panel to 19 forecasters in France, 25 forecasters in Italy, and 43 in the U.K. Overall, our dataset is characterized by a large number of observations, i. e., around 1,500 for France, 1,200 for Italy and 2,500 for the United Kingdom. In the following, we describe the CE variables used in the paper.

In each month m of year t , the CE survey provides the forecast of the 10-year government bond yield for month $m+3$ and $m+12$. We calculate the expected spread at the single forecaster level as follows. First, we collect the individual forecast (12-month-ahead) of the 10-year government bond yield for the respective country (France, Italy, or U.K.). Second, we construct the expected spread vis-à-vis Germany – i. e., the dependent variable in our regressions – based on the average of all fixed horizon 12-month-ahead forecasts for Germany included in the CE dataset. We use the average forecast for the German yield because most forecasters do not report both the forecast for the domestic bond yield and the German benchmark one.

This bond spread includes an exchange rate premium for the U.K. over the full sample and, for France and Italy, in the pre-EMU period. To filter out this effect, we subtract the forward swap spread from the forecast spread. The forward swap spread is the difference in the 10-year fixed interest rate from forward swap contracts denominated in the two currencies.

Given that swap contracts are free from default risk, the difference purely reflects exchange rate risk. During the global financial crisis, realized spreads appear to be generally under-predicted, revealing that experts tended to be ex-ante overly optimistic about developments in sovereign debt markets.

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