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Macro Insights

AB-ICI: Switching to a new methodology

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Investment Summary

- The shift in economic policy since 2014 and the need to upgrade methodology compelled us to revise AB-ICI
- AB-ICI now calculated under an updated DFM model, developed by the US Federal Reserve
- Revised AB-ICI would be up 9% since 2016 but has declined by 2% since March 2018
- Our revised index is down 0.9% m/m in October, reflecting unstable situation in the banking sector

AB-ICI – switching to a new methodology

The need to keep methodology up to date and the shift in the economic regime compelled us to develop a new model for AB-ICI

We have reviewed our methodology for calculating the AB-ICI for a number of reasons. The first reason is that our previous index methodology was elaborated in 2003-05 and there are now better international approaches available for these calculations. Second, economic policy has changed in recent years – in 2014, Russia has switched to a flexible exchange rate regime, which implies different economic behavior now than in previous decades. The third reason is that our index had been following a flat trajectory over the past three years, delivering just 1.2% growth since January 2016, while the Russian equity market advanced by around 50% during the same period, which questions the AB-ICI capacity to forecast accurately the RTS performance.

The initial AB-ICI was estimated on the dynamic factor model of the first generation…

The initial AB-ICI calculation was based on the dynamic factor model (DFM), which assumes that variables included in the model consist of two components: the common and idiosyncratic variables. The common factor is assumed as an unobservable parameter that affects all of the included variables, while the idiosyncratic factor captures specific characteristics of the input data. The applied approach is considered a first generation DFM.

…while our new model is based on a third generation DFM developed by the Federal Reserve Bank of New York and make our calculations more robust

The new approach is based on the dynamic factor model developed by the Federal Reserve Bank of New York ("Macroeconomic Nowcasting and Forecasting with Bid Data"[1]). This approach is considered a third generation DFM. The main difference between the two approaches is that the first generation model only takes into account the coexistent effect of the common factor, while the third generation version enables a more dynamic representation and makes our calculations more robust. The practical implication of the shift in methodology is that its makes further model improvements easier – the updated version is able to accommodate more variables and can potentially be expanded by adding more data series (big data) at any point in time.

The list of input variables has also been revised reflecting Russia's shift to the new economic policy

In addition to the new approach, we also revised the list of inputs used to calculate the index. The reason is that the change in monetary policy dictates new priorities when selecting the inputs. Our AB-ICI had initially replied on three components – economic confidence (capital outflow, deposit rate and share of forex deposits), foreign confidence (share of foreign banks in the assets of Russia's banking sector and FDI per employee indicator) and market confidence (durations of corporate bonds, government bond spreads, share of SMEs in financial market indices, corporate bonds spreads, IPOs and RTS index).

[1] Bok, B., Caratelli, D., Giannone, D., Sbordone, A., Tambalotti, A. (2017) Macroeconomic Nowcasting and Forecasting with Big Data *Federal Reserve Bank of New York Staff Reports*, No. 830

We retained a limited list of components:

Economic confidence component is more focused on deposit market now

- For **the economic confidence component**, we expanded the list of deposit market indicators, now using not only the share of forex deposits but also the real growth rate of ruble-denominated deposits. The second indicator should reflect the success of inflation targeting. In addition, we no longer use the capital outflow in our calculations as, under the flexible exchange rate, this variable is becoming too sensitive to commodity market fluctuations;

Foreign confidence component is now about foreign banks presence

- For **the foreign confidence component**, we kept the share of foreign banks, however we no longer utilize FDI indicator. The FDI statistics are very misleading and often reflect Russian corporate transactions via offshore centers;

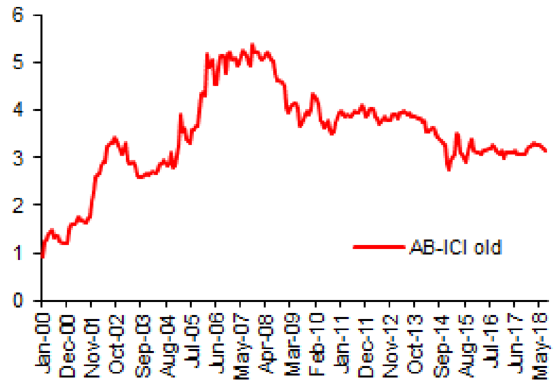
Market confidence component now includes CDS instead of spreads

- For **the market component**, we simplified the approach and now incorporate only durations of corporate bonds, sovereign CDS (replacing the bonds spread indicators), IPOs and the RTS for the index calculation.

New AB-ICI shows better correlation with electoral cycle of 2016-2018 and captured growth constraint emerging in 2011-2013

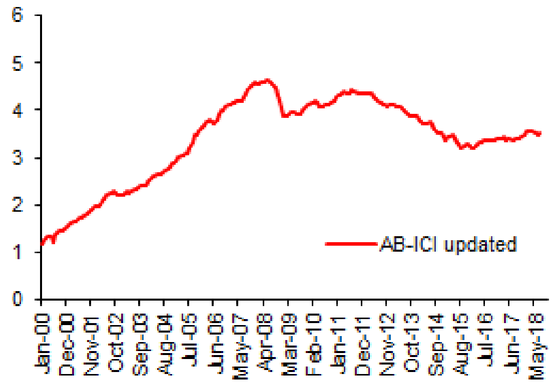
Our new model is generally in line with the previous index with some important differences. First, in the last two years the updated AB-ICI posted a more positive trend than the original index. Since 2016, the initial AB-ICI increased by a mere 1.2%, as opposed to the updated index, which added approximately 9% over the same timeframe. This updated model seems to be more consistent with the Russian electoral cycle of 2016-18, which translated into an equity market recovery of 50%. The new index is more sensitive to business cycles and more precise as a confidence and nowcasting indicator. Second, the updated AB-ICI shows a more gradual decline of its value in 2011-13, which is consistent with the disappointing economic developments of that period and associated growth constraints; the previous version of the index interpreted the 2014 crisis as an unexpected shock.

Fig. 1: AB-ICI – previous version



Source: Alfa Bank

Fig. 2: AB-ICI – new version



Source:Alfa Bank

The new index represents a structural change as opposed to our previous calculation:

Economic confidence component weighting raised to 49%...

- **Economic confidence component,** which initially accounted for 43% of the index weighting, now became of greater importance, and constitutes approximately 49%. This is in line with the fact than under the inflation-targeting policy, the role of local savings is expected to increase.

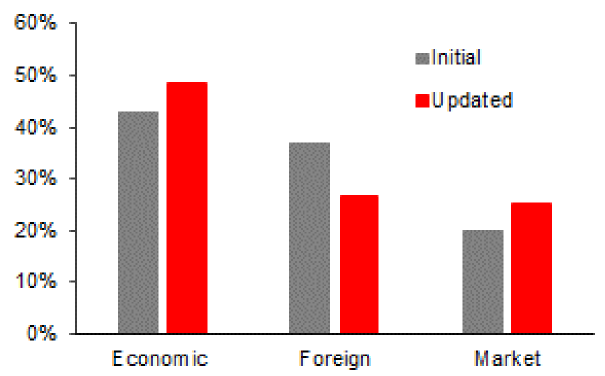
…while role of the foreign confidence is down

- **Foreign confidence component**, which accounted for 37% initially, now constitutes 26%. The decline in the foreign confidence component of the AB-ICI reflects our view that as result of sanctions, the Russian economy is more sensitive to local sentiment.

Share of the market component is up to 25%

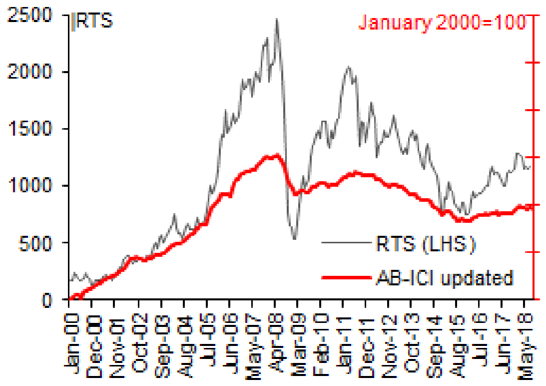
- **Market confidence component** was raised from 20% to 25% of the overall index. By shifting the weighting from the foreign confidence to the market confidence component, the resulting index captures the increased Russian sensitivity to the global economy and its deep links to global markets, which, however, are under pressure because of sanctions.

Fig. 3: AB-ICI by components, % of total index before and now



Source: Alfa Bank

Fig. 4: AB-ICI and RTS



Source: RTS, Alfa Bank

New AB-ICI provides better visibility for the RTS performance

Concurrently, the new index provides us with better visibility regarding the performance of the RTS. The most noticeable improvement of the updated AB-ICI comes from its enhanced ability to capture the moment of exit from a crisis period, as evidenced in both in 2009 and 2015, and early-bird warnings in pre-crisis periods. We attribute this improvement to the revision of the list of input variables as well as the change in the component weightings, particularly to the fact that the economic confidence component is of greater importance than the confidence of foreign players.

Despite a modest recovery in 1Q18, the AB-ICI is flat YTD

The new AB-ICI grew 9% from the beginning of 2016 until December 2017 when it reached its peak. In the first two months of 2018, the AB-ICI still showed some improvement, triggered by the election cycle. However, since March, the AB-ICI has declined by approximately 2%, due to new rounds of sanctions and geopolitical tensions. Overall, during 2018, the AB-ICI has remained under pressure and its stagnation in recent months seems to be a sign of caution with regard expectations for the RTS performance.

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AB-ICI: Banking sector dynamics in focus

A 0.9% decline of AB-ICI in October was the result of the weakness of the banking system

In October, the AB-ICI calculated under our new methodology was down 0.9% m/m. illustrating a continuing decline in overall confidence. The main driving force of this decline was the fragile situation in the Russian banking. While the deposit market performance appeared to be more sustainable in October, the recovery of the banking sector was not strong enough to support the AB-ICI.

Retail deposits significantly shrank during the period August-September

The instability of the local deposit market was the main topic of discussion in recent months. Since August, the Russian banking system has incurred significant retail deposit outflows, resulting in total losses of approximately 0.5% of the entire deposit base. This is an unusual development, as historically, the period of August-September has demonstrated weak performances. This year, Russian banks have seen noticeable retail deposit outflows, which reflect two trends. First, experts were surprised to observe a significant decrease in foreign currency deposits, although historically they tend to rise during periods of ruble depreciation and high exchange-market volatility. In August, the ruble lost about 9% of its value, while foreign exchange deposits fell by 2.6% or by $2.4 bn in August-September. Second, ruble-denominated deposits declined RUB270 bn, or by 1%, in the two-month period. This is the first time since March 2017 when growth in the ruble-denominated segment has significantly decelerated in y/y terms – as of September, ruble deposits grew at 9.9% y/y, while in 1H18 the growth rate averaged 11.5% y/y.

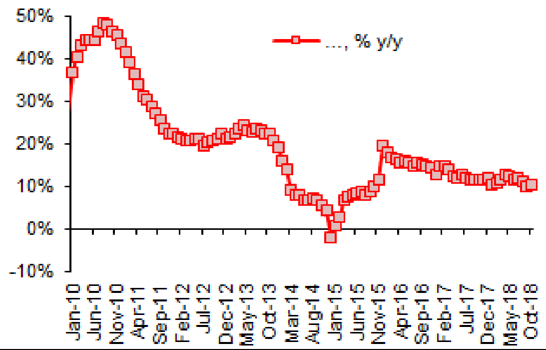
State-owned banks were hardest hit by retail deposit outflows triggered by sanctions fears

The likely explanation of this development seems to be sanctions fear. As a confirmation, state banks, rumored to be potentially included to the SDN list, were the main victims of the retail deposit outflows. For instance, Sberbank was hardest hit, accounting for approximately 40% of the total retail deposit outflows from the ruble–denominated segment and more than 80% of outflows from forex deposits. The second-largest state bank, VTB, also experienced outflows equivalent to 10% of its total retail deposits in ruble-denominated terms and 15% in forex deposits. Although some foreign and private banks benefited from this situation (Citi bank saw its forex deposits grow by 20% in August-September and Raiffeisen bank experienced a 13% increase for the same period), the banking system saw $6.3 bn of total deposit outflows during August-September, an amount which was apparently used either to fund additional real estate purchases or held in cash.

Although in October, the retail deposit market stabilized, a decline in the share of foreign banks and fears of sanctions explain the fragility of the market sentiment

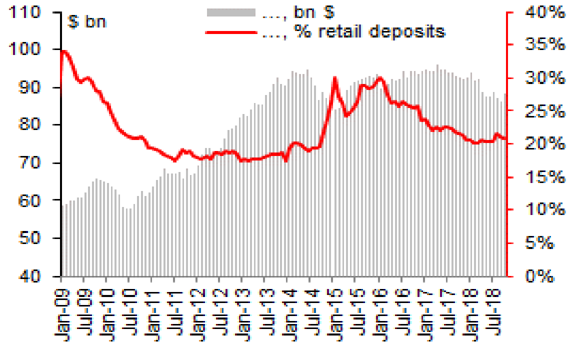
In October, the retail deposit market delivered 9.3% y/y growth, adding 0.5% m/m, which is definitely good news for the Russian banking industry. That said, forex-denominated deposits continued their decline, which indicates that some concerns remain in the banking system. Additionally, the share of foreign banks contracted from 7.7% to 7.5%, (suggesting declining foreign confidence). All of these factors along with uncertainty from ongoing tensions between Russia and Ukraine and cancelled Putin-Trump meeting in Argentina explain the fragility of the market sentiment. Geopolitical anxiety will likely to have negative affect on the performance of the AB-ICI over the next month.

Fig. 5: Ruble-denominated deposits growth in the Russian banks, % y/y



Source: CBR, Alfa Bank

Fig. 6: Forex deposits in Russian banks, % of total and $ bn



Source: CBR, Alfa Bank

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Alfa Bank applies a three-tier rating system for stocks under coverage. These ratings are based on the expected total stock return, which is the sum of the return to the target price and the expected dividend yield.

The ratings are:

Overweight (O/W):	Expected total stock return > 15%
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Owing to price volatility and our policy of not changing our ratings in response to frequent, short-term misalignments with expected returns, our ratings may sometimes not conform with the ranges indicated above.

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