climate change. The World Bank Green Bonds is an example of the kind of innovation the World Bank is trying to encourage within this framework.

The World Bank Green Bond raises funds from fixed income investors to support World Bank lending for eligible projects that seek to mitigate climate change.

Since 2008, the World Bank has now issued over USD 9.7 billion equivalent in Green Bonds through more than 125 transactions in 18 currencies. World Bank Green Bonds are an opportunity to invest in climate solutions through a high quality credit fixed income product.

The World Bank's Green Bond program supports the transition to low-carbon and climate resilient development and growth in client countries.

World Bank green projects, like all World Bank projects, are designed to reduce poverty and improve local economies. But green projects specifically focus on tackling climate change issues that directly impact developing countries

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Shcherbyna A.

PhD in Economics, Assoc. Prof., Department of Financial Markets, Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine

COMMODITY DERIVATIVES IN UKRAINE: DEVELOPMENT PROSPECTS

In Ukraine the gross volume of crop production reached 124.6 m tones or 7.3 bln USD by the end of 2016. In particular the production of grains and oil crops totaled 65.9 m tones [1]. Moreover, it is expected that the current level of production in general would remain stable in 2017. [2].

The contribution of total agriculture is projected to be 17% of Ukrainian GDP and the share in export is estimated at 40% [3].

Despite large volumes of production Ukrainian agricultural companies don't have market-oriented ability to hedge their operational risks in Ukraine.

It is in common for farmers or farmland owners to use hard agreements with big agricultural corporations that allow farmers to sell full amount of their product at the future market price but with some discount in behalf of the buyer. This practice empowers farmers to get machinery or fertilizer at the best price and ensure the sale of products in the future. It's stimulating the grain trade market development but it's lowering margins for farmers.

Commodity traders work with forward contracts and major exporters hedge small amounts of grains in Europe or USA.

To say about currency risk the situation is much more complicated. Direct methods to hedge hryvna fluctuations are not available in Ukraine, although the price of grains forms on foreign markets in US dollar or euro.

To sum up, lets define the main financial risks on commodity market in Ukraine:

- Price risk (prices dynamic of commodities depends on the situation on commodity exchanges in Paris (MATIF), London (LIFFE) and Chicago (CBOT).
- Currency risk (Ukrainian hryvna devaluation, currency restrictions by National Bank of Ukraine and legal requirement for exporters to exchange significant part of currency revenue into hryvna).

- Credit risk (counterparty risks, risk of default of one of the parties in trade agreement)

There were a number of attempts to create an exchange market for commodity assets. For example, Ukrainian Exchange launched futures on USDUAH in 2015 and futures on Brent oil in 2016. But the turnover in these derivatives is too low to attract major commodity players.

A positive step to reform the market in the way to make commodity derivatives trading more effective was made by the government after passing the package of bills about regulating markets and derivatives in the late 2016 [4]. Also Head of Agrarian Fund Andriy Radchenko initiated the implementation of wheat futures on domestic exchanges [5].

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Sushchenko O.

PhD in Economics, Assoc. Prof., Department of Finance,
Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine

Hychka O.

M. So., Context for Planded Valve Studies

M.Sc., Center for Blended Value Studies

Garlytska D.

Department of Finance, PhD Student

Department of Finance,, PhD Student Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine

CITIES CLIMATE FINANCE

- 1. Cities are generating more than 80% of the global GDP, at the same time they are responsible for 70% of the overall energy consumption and GHG emissions. Moreover, almost 60% of the global population will live in the cities by 2030 [1]. It means that these areas will be engaged the most in solving existing global problems.
- 2. In 2016 Ukraine signed the Paris Climate Agreement and according to this document should reduce the GHG emissions. There are different ways of fulfilling those obligations and the most important are associated with improvement of the energy efficiency and increase of the renewable energy production. I other words, we should build up the so-called green, climate resilient economy.
- 3. According to different estimations (for instance, DIW Econ), Ukraine needs approximately 200 billion USD to achieve climate-related goals and create climate resilient (green) economy. Its obvious that there is a lack of internal financial resources for this purpose and the situation looks more dangerous on the local level because the local budgets are suffering from huge deficits and there are no additional sources of revenues the tax burden is enormous (more then 60%).
- 4. Taking into account all these circumstances, we should look more precisely at the market financial instruments and try to create the legal framework to implement and use them in Ukraine. The international financial market has a wide range of different instruments elaborated with the main purpose to make the access to green/climate finance easier.
- 5. The cities all around the world are using following types of universal financial instruments to raise climate finance: green bonds, sustainable development bonds, social impact bonds, etc. [2]. In fact, cities are the pioneers in implementation of all those instruments and carrying the so-called transaction costs associated with accumulation of climate finance