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## **КОНКУРЕНТНА ДЕВАЛЬВАЦІЯ, ЯК ГЛОБАЛЬНА ПЕРЕШКОДА УЗГОДЖЕННЮ ВАЛЮТНО-РЕГУЛЯТОРНИХ ЗАВДАНЬ**

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## **COMPETITIVE DEPRECIATION. A GLOBAL OBSTACLE TO MONETARY REGULATORY TASKS' CONSENSUS**

**Анотація.** На сучасному етапі розвитку світового господарства та міжнародних економічних відносин можливі суперечки щодо завдань валютного регулювання міжнародної економічної діяльності. Такі цілі діяльності національних валютно-регуляторних органів, як сприяння міжнародній конкурентоспроможності національних виробників, можуть суперечити цілям міжнародних валютно-регуляторних організацій. Однією із таких суперечностей можна вважати конкурентну девальвацію, поняття якої визначено, зокрема Статтями Угоди Міжнародного Валютного Фонду. Проблематику конкурентної девальвації, як теоретичного явища, вивчали такі зарубіжні

вчені як П. Бергін, Д. Корсетті, Д. Лі, Г. Ліма, Д. МакКомбі, Р. Рібейро, А. Роднянські, С. Сяо, Л. Танг, Й. Тервала, Ш. Чжоу, серед вітчизняних вчених, чії праці присвячені зазначеній тематиці, можна виокремити О. Виноградову, В. Голюк, В. Дергачову, М. Кравченко, З. Луцишин, Н. Резнікову та інших. У статті проаналізовано сучасні теоретичні засади девальвації національної валюти, як способу впливу на набуття національними виробниками конкурентних переваг на світових ринках. Метою роботи є визначення засад валютного регулювання, на яких державні механізми впливу на національну валютну систему можуть одночасно сприяти набуттю національними виробниками конкурентних переваг на світових ринках та спричинити девальвацію національної валюти. Визначено основні напрями регуляторної діяльності національних органів валютної політики, що потребують модернізації, а саме: механізм регулювання грошової пропозиції з метою сприяння набуттю національними виробниками конкурентних переваг на світових ринках.

**Ключові слова:** конкурентна девальвація, NOEM, грошова маса, центр-периферичні моделі, світове господарство.

**Abstract.** At the current stage of development of global economy and international economic relations, certain disputes over the goals of regulatory framework on international economic activity may arise. Such regulatory objectives of domestic monetary authorities as promoting the global competitiveness of domestic producers, may contradict the regulatory objectives international monetary authorities. One of such contradictions is competitive depreciation, the concept of which is defined, in particular, by the Articles of Agreement of the International Monetary Fund. The issue of competitive devaluation as a theoretical phenomenon has been studied by such foreign scholars as P. Bergin, D. Corsetti, D. Li, G. Lima, D. McCombie, R. Ribeiro, A. Rodnianski, S. Xiao, L. Tang, Y. Tervala, S. Zhou; among the domestic scholars whose works are devoted to this topic, we can distinguish O. Vinogradova, V. Holiuk, V. Dergachova, M. Kravchenko, Z. Lutsyshyn, N. Reznikova and others. This article analyzes the modern theoretical foundations of domestic currency depreciation as a way to promote gains of competitive advantages on global markets by domestic producers. The purpose of the study is to determine the fundamentals of monetary regulation on which available to monetary authorities mechanisms of influencing the domestic monetary system may simultaneously contribute to gains of global competitive advantages by domestic producers and cause the domestic currency depreciation. The main areas of regulatory activity of domestic monetary authorities that need to be modernized, namely, the mechanism for regulating the money supply in order to facilitate the acquisition of competitive advantages by national producers in world markets have been identified in this article.

**Key words:** competitive devaluation, NOEM, money supply, center-periphery models, global economy.

JEL codes: F30, F33, F41.

**Problem setting.** If the global monetary regulatory framework's primary goal is the maintenance of global economic equilibrium, the goal of promoting the competitiveness of national economic agents on global markets may contradict the its' primary goal. Thus the global monetary authorities might tend to restrict national monetary authorities' use of tools that will promote the competitiveness of national economic agents on global markets.

Thus, in terms of globalization-driven competitive monetary policy, obstacles to tasks' consensus between the global monetary regulation system and the national monetary regulation of international economic activity system. The concept of competitive depreciation might be viewed as one of these obstacles. In the context of the Section 1 (iii) of Article IV of the IMF agreement, competitive devaluation is viewed as

manipulating exchange rates by a member state to gain an unfair competitive advantage over other members [1, p. 6]. At the same time, the Articles of the IMF Agreement provide for the right of member states to vote for permission to introduce a widespread system of exchange arrangements based on stable but adjustable par values [1, p. 7]. Par values shall be established in terms of special drawing rights (SDR) or another common denominator, except for gold or any currency, with exchange rates to fluctuate within the 4.5 % margin from such [1, p. 67]. Since the SDR has not become globally widespread unit of account, we might calculate the marginal rate of domestic currency depreciation by assuming that the US dollar is the globally widespread unit of international accounts, and the domestic currency depreciation is a decrease in its exchange rate against the US dollar. The rate of SDR against the US dollar reached its peak value on March 18, 2008 [2]. Since then, there has been a constant downward trend of the SDR exchange rate against the US Dollar — devaluation at the level of 1.4 % per year (calculated by the author on the basis of [2]). Thus, according to the Articles of Agreement of the IMF, one might view a 5.9 % annual domestic currency depreciation as the limit rate. Unfortunately, IMF's Articles of Agreement seem to fail providing for a more detailed reference on whether the exceeding annual domestic currency depreciation exceeding the limit rate shall be viewed as competitive depreciation.

**Literature review.** The Article IV of the IMF's Agreement remains in force since the adoption of the second amendment to IMF's Articles of Agreement back in 1978. The competitive depreciation was viewed by economics as a special case of the beggar-thy-neighbor policy back then. Three assumed consecutive macro effects from the domestic currency depreciation supported the mentioned view. The first effect was supposedly the increase in price competitiveness on world markets of goods of national production compared to similar goods of foreign production. That supposedly resulted in the second effect being a boost of domestic production and net exports, which yielded the third effect being an improvement of domestic country's trade balance conditions and domestic incomes. Thus, the domestic monetary authority could theoretically use its' available tools to depreciate the domestic currency on purpose.

First doubts of the above-mentioned sequence of effects from domestic currency depreciation emerged with began to be questioned with the development of the New Open Economy Macroeconomics (NOEM) in the early 1990s [3, p. 1]. The NOEM views money supply as the primary tool to influence the exchange rate. Namely, the domestic monetary expansion requires the domestic monetary authority to lower a policy rate for the money supply to properly balance the money demand. If the interest rate on bonds denominated in domestic currency interprets the domestic country's risk premium, the lowered policy rate implies the lowered country risk premium resulting in the lowered global demand domestic currency and to finally yield domestic currency depreciation [4, p. 8–9; 5, p. 7–8]. NOEM literature might refer to a 50 % drop in the yen exchange rate led by Shinzo Abe's government initiated qualitative and quantitative monetary easing in 2012 as a textbook example [6, p. 14; 7, p. 9–10].

The NOEM literature highlights the following factors to impact on further outcomes of the money supply driven domestic currency depreciation:

1. Armington elasticities being the degrees of substitution in demand between similar goods produced in different countries [4, p. 6; 5, p. 5; 7, p. 29; 8; 9, p. 6; 10, p. 4].
2. Sticky pricing being the feature of certain goods' pricing to keep the nominal prices probably unchanged in the short-term period, regardless of market conditions [4, p. 8; 5, p. 10; 7, p. 35; 9, p. 9].

Also, the NOEM literature tends to highlight the degree global economy's polarity as a major factor to impact on the above-mentioned outcomes. Namely, one might classify the NOEM studies on competitive depreciation by the assumption that global economy:

1. Absolutely multipolar with all countries being equal in terms of economic size and power [4, p. 23; 5, p. 12];

OR

2. Is of limited multipolarity based on 2 criteria with several — 1 to 3 — countries (1) significantly outperforming the rest of the world in terms of gross domestic product [9, p. 86; 10, p. 4] and/or (2) issuing currencies sufficiently widespread as a unit of international account and sufficiently convertible for being considered the global ones [7, p. 27]. In other words, the global economy consists of several countries holding the status of economic centers with the rest of the world holding a status of economic peripheries [9, p. 6].

Under the first assumption, the domestic currency depreciation might be viewed as a tool for beggar-thy-neighbor policy implementation. For instance, emphasized by Bergin and Corsetti (2020), nominal currency depreciation can also lead to real currency one by sticky pricing. This might result in domestically produced goods to become cheaper comparing to their foreign analogs. The results might impact the structure of international trade in domestically produced goods with an increase in their net exports. With pricing being significantly sticky, the real currency depreciation might yield changes in the country's comparative advantages, which would possibly remain unchanged with pricing being less sticky [4, p. 22–38].

As emphasized by Tervala (2013), in case of significant Armington elasticity, the money supply driven domestic currency depreciation boosts global trade in domestically produced goods. If learning by doing (experience curve) effect implies an increase in labor productivity with the volume of production increases, the domestic currency depreciation additionally boosts global trade in domestically produced goods, at the same time suppressing global trade in foreign produced goods, under the influence of learning by doing effect. Due to the same effect, the money supply driven domestic currency depreciation boosts the growth of domestic incomes, which leads to an increase of domestic consumption, thereby mitigating the harmful effects of currency depreciation in case of low Armington elasticity [5, p. 9–20].

Under the second assumption, the outcomes of the domestic currency depreciation might become uncertain with the latter not being supported by adequate import substitution measures, and might in no way contribute to beggar-thy-neighbor policy implementation, in case of the neighbor being an economic center. For instance, emphasized by Xiao et al (2011), there might be the case of asymmetric Armington elasticity, where the one for periphery originated goods to significantly exceed the same for center originated goods. There also might be the case of hidden protectionism in the economic center, with centers' consumers perceiving the domestic goods as more attractive by default [9, p. 6–7].

As emphasized by Ribeiro et al (2017), there might be the case of hidden protectionism in the economic center, in which the economic center exports both final and intermediate consumption goods, and the economic peripheries does only final consumption goods. Thus, the Armington elasticity for intermediate consumption goods is be zero for the economic center and is greater than zero for the economic

peripheries. Therefore, in case of a periphery country, a necessary condition for domestic currency depreciation to promote the price competitiveness of domestic goods is low import dependence of such a production [10, p. 4–10].

As emphasized by Rodnyansky (2017), in case the neighboring center's currency acquiring global currency status, domestically imported intermediate goods' value might be denominated in neighbor's currency regardless of the country from which the goods were domestically imported. Thus, the domestic currency depreciation might in any case affect the cost price of domestic goods [7, p. 35]. This might restrain the domestic currency depreciation from promoting domestic goods' price competitiveness. The strategic complementarities in domestic goods' pricing, being the pattern of domestic goods' pricing to be domestically rather than globally oriented, might put additional additional restraints [7, p. 36–48].

**Research methodology.** Both general scientific and special methods were used in the research process. The method of abstraction was used to define the concept of competitive advantage. In this article, competitive advantage is viewed as a microeconomic category: a set of attributes acquired by a domestic producer that enable it to produce and sell the variety of goods on global market with better indicators than foreign producers. Acquisition of competitive advantages is achieved by implementing one or two competitive strategies emphasized by Porter (1980): (1) cost leadership, (2) product differentiation and (3) occupying a market niche [11, p. 35–40]. The concept of global competitiveness of states, proposed by the World Economic Forum, is considered by the latter as a set of institutions, policies and factors that determine the level of productivity of the country [12, c. 4]. Therefore, the advantages of domestic country's by certain indicators of its global competitiveness shall be viewed as factors that contribute to the domestic producers' gains of competitive advantages, and shall not be view as country's competitive advantages. To form basic assumptions, the research used the method of analysis and synthesis. Namely, the research is based on the assumption whether the global economy is of absolute or limited multipolarity. To provide for reasoning of this assumption, the research used methods of statistical analysis. Namely, in order to determine the polarity of the world economy, (1) the distribution of world GDP by purchasing power parity for years 2010–2021 between China, The United States and The Euro Area is analyzed, (2) the width of spread of the specified countries' currencies as units of international account for the same years is analyzed.

**Unresolved issues identification.** According to the review of the literature to have studied the concept of competitive depreciation, some issues remain insufficiently explored. The issue of whether the domestic currency depreciation might boost domestic producers' gains of competitive advantages, be the latter defined as provided in methodology section, remains unresolved.

**The purpose of the article** is to determine the fundamentals of monetary regulation, which provide for monetary policy tools to be used in the way that might both boost domestic producers' gains of competitive advantages and depreciate domestic currency.

**Results.** The Fig. 1 shows the distribution of world GDP by purchasing power parity for 2010–2021 between China, the USA and the Euro Zone. Together, these 3 countries account for almost half of the world's GDP at purchasing power parity.

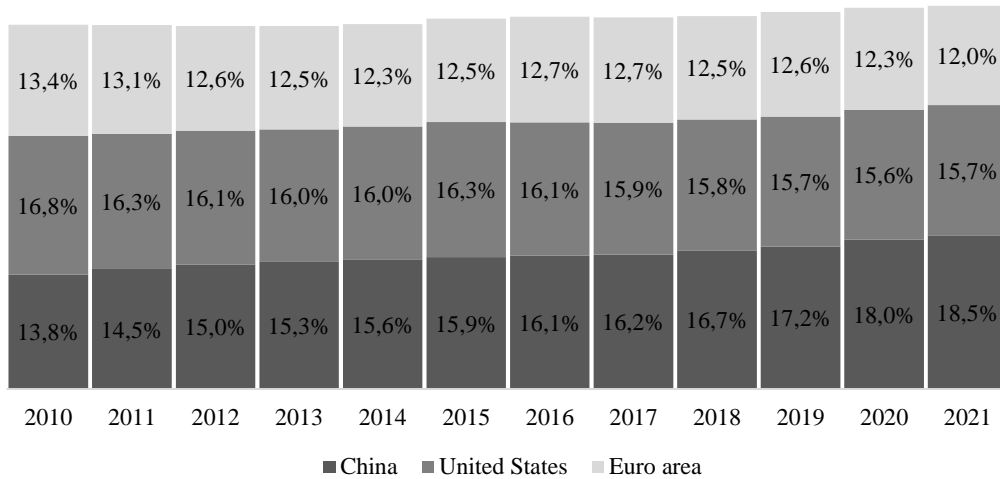


Fig. 1. The ratio of GDP by purchasing power parity of China, the United States, and the euro zone to the global GDP by PPP for 2010–2021.

Source: built by the author based on [13]

The Fig. 2. Highlights the extent to which US Dollar and Euro have been historically used as a unit of international account. Given the results of this and the above analysis, this article’s research is based on the assumption of global economy to be of limited multipolarity, where the USA, China and the Eurozone are the economic centers and the rest of the countries are the economic peripheries.

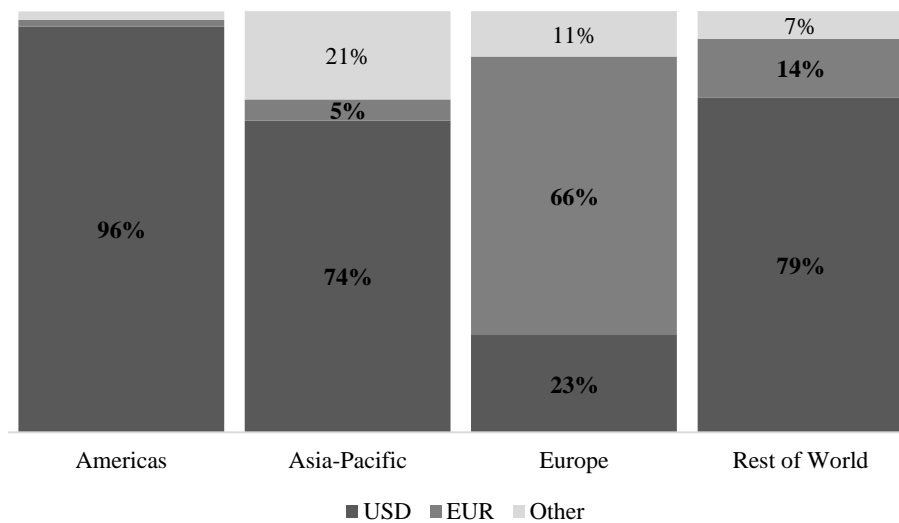


Fig. 2. Shares of currencies’ export invoicing

Source: built by the author based on [14]

Within the scope of the article, 5 types of competitive advantages are possible:

1. Simple cost leadership: increasing the chances of surviving a price war primarily through improved labor productivity.

2. Wide differentiation: if market conditions allow economies of scale, cost leadership is ensured, in particular, by output scaling, while adequate sales scaling is ensured by differentiation, which implies providing the widest range of goods among competitors.

3. Niche cost leadership: focusing on a niche while simultaneously increasing labor productivity, which might help to optimize costs in the event that competitors declare a price war on the niche as well.

4. Niche differentiation: development of a good that is not similar in its characteristics to any of the goods of competitors, thanks to which a niche is occupied, free from competition, on which the activity is concentrated.

5. Simple niche strategy.

As provided in the literature, the domestic currency depreciation primarily boosts domestic producers' gains of cost leadership. It might also boost the gains of other types of competitive advantage, as it can cause a relative decrease in the cost of means of production. At the same time, it can provide exactly the opposite if imported goods make up a large share of the capital of the national producer. To determine the criteria by which the domestic currency depreciation might be considered as contributing to the domestic producers' gains of competitive advantages, let us consider the following details.

Let the national economy be peripheral and consist of a number of producers, each of which is an aggregated cluster of enterprises producing one consumer good, for which there is a demand in the global market. Let us not take into account consumer goods, which are in demand primarily within domestic markets. Thus, let the observed production clusters be denoted as exporting clusters. Exporting clusters also include enterprises that produce intermediate input goods. For some exporting clusters, the domestic currency depreciation, in the short and medium-term, might contribute to the gains of competitive advantages. Such will be denoted as depreciation stakeholders. For other exporting clusters, the domestic currency depreciation, in the short and medium-term, might contribute to their losses of global competitiveness. Such will be denoted as depreciation victims.

Let us consider monetary expansion as the primary tool for domestic currency depreciation, and depreciation itself as competitive in case it ensures the sum of the depreciation stakeholders' benefits to exceed the sum of depreciation victims' losses. Given the mentioned, the domestic monetary regulation should be based on the following principles.

1. Channels of money supply during expansion should be regulated in the way to avoid consumer lending as the destination and allow only loans for capital raising as destination. Thus, since the money supply will not ultimately affect the increase in aggregate demand, domestic prices may remain unchanged in the medium term. This, in turn, might reward domestic exporters' avoidance of strategic complementarities in domestic goods' pricing.

2. Enterprises belonging to exporting clusters should be prioritized in getting loans for capital raising. Both enterprises directly producing exportable consumer goods and enterprises producing the necessary intermediate input goods should be equally

prioritized. By that, the domestic monetary authority might ensure import substitution of intermediate input goods.

3. If the applicant for capital raising loans produces an exportable consumer good, it is desirable to adopt the requirements for applicant's submission of business plans containing a competitive analysis of foreign producers and their pricing.

Given the mentioned principles, the money supply might with no doubt be regulated in the way, it both contributes to the domestic producers' gains of competitive advantages and ensures the domestic currency depreciation not exceeding the limits established by the Articles of Agreement of the IMF. Study into this issue goes beyond the scope of this article.

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