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OVERVIEW OF THE UKRAINIAN PUBLIC DEBT MODEL

The exploration of Ukraine's public debt is critical in understanding its economic stability, as it has direct implications on the country's budget planning, financial management, and overall ability to foster economic development. A high level of indebtedness, which could be indicative of poor fiscal management, not only jeopardizes Ukraine's investment attractiveness but also constrains its ability to fund social programs, healthcare, and infrastructure. Therefore, studying state indebtedness is essential in identifying strategies for debt reduction and improved financial management, which may include expenditure cuts, increased tax revenues, and pension system reforms.

The Ukrainian public debt model is meticulously designed to navigate the intricacies of managing national debt under a set of unique and challenging conditions. Central to this model is the dual approach to borrowing, which includes both internal and external sources. Internal borrowing primarily involves the issuance of government securities, a method that not only meets immediate funding needs but also fosters a deeper domestic financial market. These securities, often in the form of bonds, are typically purchased by local banks, institutions, and sometimes individuals, thus retaining capital within Ukraine's borders.

The study employs a distributed approach, categorizing state debt into external and internal components. The model is based on the historical data from the Ministry of Finance of Ukraine and the State Statistics Service of Ukraine for the 2016-2022 years (Figure 1). A key finding of the model is the projected near doubling of the cost of debt servicing by 2026, a significant concern for the country's fiscal stability. This escalation is particularly alarming in the context of external debt, which is anticipated to soar from $107 billion by the end of 2024 to $153 billion by 2026.

Such a rapid increase in external debt, coupled with an upward trend in the debt-to-GDP ratio, signals a worrying economic outlook for Ukraine. This increasing

debt-to-GDP ratio indicates that the nation's debt is growing at a faster pace than its economic output, a situation that could lead to severe financial constraints and hamper economic growth.

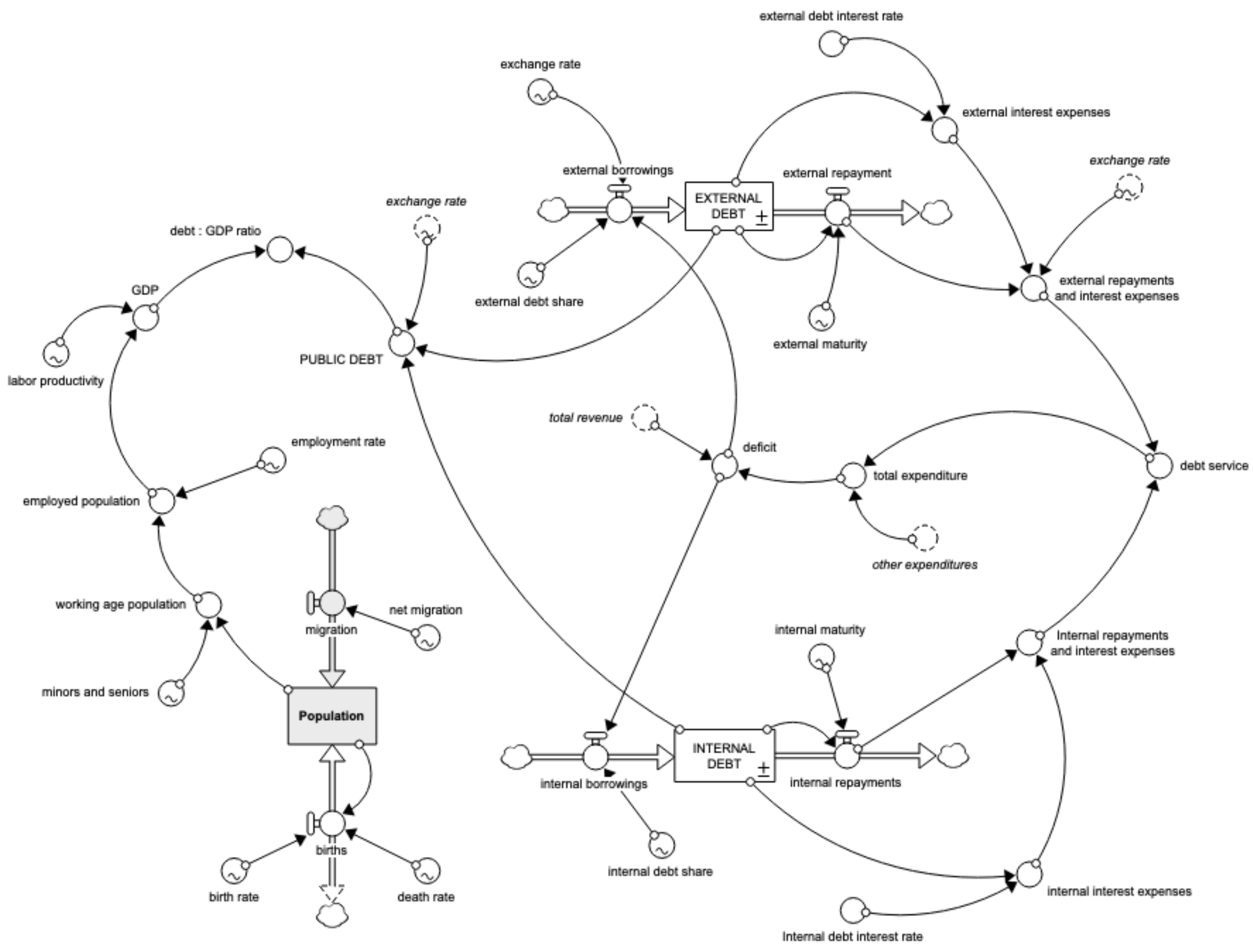

Figure 1. Model of systemic dynamics of public debt in Ukraine

The importance of considering exchange rate fluctuations in the calculations of external debt is another critical aspect highlighted by the model. Currency volatility can significantly impact the size of the debt and the cost of its repayment. With the model predicting a rapid escalation in repayment costs, nearly doubling by 2026, Ukraine faces the risk of increased financial burdens due to adverse currency movements. This scenario underscores the need for effective currency risk management strategies in the country's debt management plans.

Additionally, the model brings to light the profound impact of war-induced emigration and economic instability on Ukraine's GDP. The expected decrease in population, because of these factors, is likely to negatively affect the nation's

economic output, further exacerbating the debt-to-GDP ratio. This demographic change, coupled with the economic disruptions caused by ongoing conflicts, presents a significant challenge to maintaining a stable and sustainable fiscal environment.
Another alarming prediction from the model is the more than fourfold increase in government expenditures by 2026. This surge is primarily driven by escalated defence spending and increased costs of debt servicing. As government expenditures directly influence both internal and external borrowing, this trend is expected to lead to a significant growth in the overall state debt. To manage these rising expenditures, the government is anticipated to partly rely on loans, with external borrowing projected to hit $42.3 billion annually by 2023.

One of the most pressing challenges identified for the 2023 budget is the substantial debt burden, with the state debt expected to reach an overwhelming 142% of Ukraine's GDP by the end of the year. This level of indebtedness severely limits the government's ability to fund other critical expenses and could constrain its economic policy options. Furthermore, the increase in borrowing in 2022, particularly from the National Bank of Ukraine in the form of government bonds, poses additional repayment challenges. These challenges are likely to impact Ukraine's financial relations with key international entities like the International Monetary Fund (IMF) and its aspirations for closer integration with the European Union (EU).

The Ukrainian public debt model presents a comprehensive framework that is critical in understanding the nation's current economic challenges and the pathways to achieving fiscal stability. This model, underpinned by a dual approach to borrowing, balances internal financing through government securities with external loans from international bodies. It not only addresses immediate funding needs but also strategically shapes the country's financial market dynamics. The reliance on external funding, while necessary for development and reforms, exposes Ukraine to global economic and political fluctuations, necessitating astute management of these liabilities.

The model's focus on debt sustainability, highlighted by the debt-to-GDP ratio, underscores the importance of economic growth and fiscal discipline in debt management. Initiatives aimed at boosting national income and prudent spending are

essential to ensure that borrowing drives long-term economic benefits rather than temporary relief. This approach is particularly crucial in light of the ongoing war with Russia, which has significantly strained the country's fiscal resources, necessitated increased defence spending and causing substantial economic disruptions.

Furthermore, the model's interconnection with Ukraine's economic policies and international relations is evident. Economic policies related to taxation and government expenditure directly influence the nation's debt management strategy, while international relations shape the conditions under which external funding is accessed. Domestic politics, reflective of public opinion and political agendas, also have a significant role in formulating and implementing the public debt strategy. This complex web of factors demands a nuanced approach to navigating the country's economic and geopolitical landscape.

Finally, the projections from the model are a stark reminder of the challenges ahead. The forecasted increase in debt servicing costs, the rise in external debt, and the growing debt-to-GDP ratio all point to potential economic hardships. The model highlights the importance of considering currency fluctuations in debt calculations and acknowledges the impact of war-induced demographic changes on the economy. The government's response, including its strategy for increased external borrowing and managing the substantial debt burden, will be pivotal in determining Ukraine's fiscal future and its path towards economic stability and growth.

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