

Daniel DĂIANU, April 3, 2024

Artificial Intelligence (AI) and National Independent Fiscal Institutions (IFIs)ⁱ — a few thoughts —

Al epitomizes the new industrial revolution, with an anticipated huge transformative impact on economy and society at large, but also surrounded by ensuing major uncertainties. There are authoritative voices which argue that Al could make "machines" surpass the cognitive abilities of humans¹. Al brings about great benefits, but, also, entails major risks unless its use is carefully managed; hence, regulation of Al is in the making.

Following a previous text², I was asked how AI could impact the activity of national IFIs. Below, I would list a few ways of fathoming how AI could impact the activity of national IFIs; observations refer to the general context, remits and tools of national IFIs, the big variety of national IFIs, fiscal rules, and possible institutional changes. The focus is on EU national IFIs, but some of the conjectures have, arguably, wider bearing.

1. The general context

Uncertainties abound nowadays and are linked with climate change, energy transition, pandemics, wars. Al could help mitigate the impact of extreme events and processes, but could also entail new uncertainties and can foster dazzling military competition, that can get out of control.

¹ "Cold war-style safeguards needed to avert AI Armageddon, scientists warn" (Cristina Griddle and Eleanor Olcott, Financial Times, 19 March 2024); it echoes strong warnings of Henry Kissinger, Eric Schmidt and Daniel Huttenlocher, "The Age of AI", London, John Murray, 2022). See also Helga Nowotny (2023): "The Illusion of Control: Living with the Others", key lecture at the Academia Europeae conference, Munchen, 9-11 October.

² Daniel Dăianu, "Why AI cannot prevent financial crises", Consiliul Fiscal, February, 2024.

Scenarios vary much in terms of the impact of AI on economy³; IMF estimates that cca. 40% (60% in advanced economies) of current jobs will be wiped out by AI in the future, which would further strain the social assistance capacity of governments. Could AI create new jobs at a speedy pace, empower people who lose their jobs with new skills in due time? This is an open question.

Al can make financial systems more fragile, in spite of enhancing capacity to gather, classify and process date at both micro and macro levels. Panics (herd behavior), contagion, cannot be eliminated. And Al can enhance systemic risks and favor frauds and money laundering, though Al could also help fight fraudulent behavior. And what matters for national IFIs as well, higher fragility could entail new rescues (with public money) of private entities, that would increase public debts. This is why national IFIs would have to instill their activity with a macroprudential thrust as well (Dăianu, 2024)⁴.

It is not clear whether AI will raise GDP growth significantly (one finds here an echo of Robert J. Gordon's thesis on the impact of technical change on economic growth⁵), or help keep overall economic growth rate (g) higher than (i), the interest debt payment. Future GDP growth will be influenced by the loss of the peace dividend, due to geopolitics and military threats. More resources would be assigned to defense expenditure; this would influence resource allocation and complicate the trade-off between "guns and butter" at a time of a *cost of living crisis*. And this would happen at a time of rising public debts worldwide due to extreme events and when monetary policy rates are much higher than a few years ago. These rates will get lower in the years to come (as inflation is subdued), but are unlikely to reach the levels associated with central banks' unconventional operations that followed the financial crisis. Public debt sustainability will amplify as a major concern, for national IFIs as well.

The world gets more fragmented along geopolitical fault lines, which will likely raise production costs (ceteris paribus), while industrial policies (with a protectionist bent) seem to be on the rise. I would posit that AI will be used to support such policies. And AI will likely increase *market concentration* as giant corporations have more resources to invest; this may not be a good thing for

³ See also Anton Korinek, "Scenario planning for an A(G)I future", Finance & Development, December 2023.

⁴ Daniel Dăianu, "National Independent Fiscal Institutions need to be stronger to perform effectively", Intereconomics, 59(2), 2024, p.112-118.

⁵ Robert J. Gordon, "The Rise and Fall of American Economic Growth", Princeton, Princeton University Press.

economies. Market concentration will impact the financial sector, too, and enhance systemic risks.

Al may deepen social tensions, not least since many persons will lose their jobs) and income inequality will grow. This could have wide political repercussions. Governments would be pressured to increase social expenditure while they have to control overall expenditure —as the new fiscal governance framework demands. And governments may have to increase taxation to keep budget deficits under control.

2. Mission and tools of national IFIs through the lenses of AI

Al will help national IFIs gather to classify and process much larger pools of data; this could support economic forecasting/assessment and all kind of analyses. And Al could help IFIs which do not undertake forecasting themselves⁶ to "grow" institutionally and do it in the future.

Al could meliorate estimates of net expenditure paths (which are main operational tools of the revised EU fiscal framework), and of *output gaps* as well. Al could improve debt sustainability analysis, which matters much to national IFIs as well. Al could enhance more thorough *spending reviews* (or assessments), but, it must be said, that most EU IFIs do no perform this task currently. And it is an open question whether spending reviews can pe performed by national IFIs unless they grow institutionally and are much better equipped with human resources.

Al could allow deeper analyses of economy's transformation and future dynamics: GDP growth rates, demographics, labor markets, taxation regime, tax evasion and tax avoidance, etc. But such an undertaking would much enlarge the current tasks of many EU national IFIs, and as mentioned, many of them do not have adequate resources.

Al and ensuing effects on financial stability should induce national IFIs to focus on broad systemic risks and acquire a macroprudential thrust (focused on contingent and hidden liabilities) in their work --as is probably the case with the European Fiscal Board. When the financial system is more fragile, considering broader systemic risks is a must. This is the lesson of the financial crisis, of the pandemic of the energy crisis, etc.⁷

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⁶ They do, however, assessments, or endorse official forecasts, currently.

⁷ See also Daniel Dăianu, "National IFIs need to be stronger to perform effectively, Intereconomics, 59(2), March April, 2024.

National IFIs would have to consider the implications of "war economies" and of the rise in defense expenditure. It may be that the EU budget would undergo related changes and one has to see whether defense related EU collective bonds will be issued. By the way, the new European Commission will quite likely have a EU defense commissioner and more resources will be assigned to develop European defense industry.

The bottom line is that human judgement cannot be replaced by non-human intelligence in nontrivial aspects. Not least because, as Anselm Kuester argues, Al tools are trained on past data, that may not reflect reality in extreme events⁸.

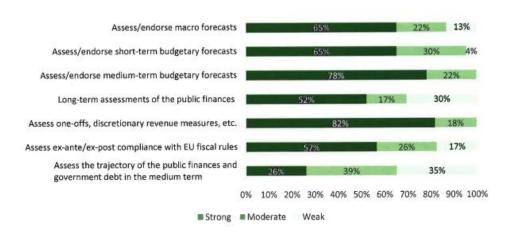
3. Could AI reduce institutional/capacity gaps among EU national IFIs?

There is a baffling (large) variety of national IFIs in terms of mandates and capabilities. Some operate as large think tanks (e.g., in Belgium, in the Netherlands, in Spain, in Denmark), which undertake a wide range of analyses, including economic platforms of political parties —as in the Netherlands. In Germany, there is a web of major economic research institutes that can perform tasks of IFIs. But such entities may be hard to replicate all over the EU, at least in the short and medium term. Apart from IFIs' current mandates and available resources, varied cultural, historical, political and institutional settings within the EU member states condition what is feasible to do in upgrading their mandates in the short/medium term.

Likewise, what matters more than formal assignments is the level of national IFIs' analytical capabilities and reputation. In this respect, it is interesting to notice how many IFIs produce macroeconomic forecasts (or debt sustainability analysis) themselves vs. how many make only endorsements/assessments; this gives a flavor of differences among IFIs with regard to expertise, capacity, remit (figure 1 below).

⁸ Cited by Jeff Kearns, "AI reverberations across finance", Finance & Development, Dec. 2023, p.41

Figure 1 IFIs capacity by type of task



Note: This figure is based on the survey responses of 29 IFIs from 25 EU countries. The category 'strong' includes IFIs that reported having sufficient or complete capacity, and the category 'weak' includes all IFIs that reported having minor or no capacity to carry out the proposed tasks.

Source: Network of EU IFIs (2022)

National IFIs must be strengthened and the EC and the EFB are right to emphasize that *minimum common standards* have to operate. But common minimum standards need to be enriched in meaning for "the devil is in detail"; what seems to be common at the surface may hide big qualitative differences.

Many IFIs do not have (yet) the capacity to produce a DSA; and there is a difference between producing a forecast and endorsing a forecast, which is presumably related to individual institutional capacity, aside from what national mandates say. As a survey made by the national IFIs network notices, less than half of the them have the capacity to provide long-term assessment of public finances (EUIFI, 2022). The Council directive proposal talks about the possibility of having several IFIs in member states. This idea can help when it comes to tasks that exceed the analytical capacity of many national IFI's – e.g.: demographic analysis, spending reviews.

The bottom line is: AI can help national IFIs develop their institutional/analytical capacity, but would not necessarily reduce capacity inequality among them. It may even deepen capacity inequality in a way that replicates the impact of AI on market concentration in general.

4. Would national IFIs have to change internally to deal with AI?

Clearly there should be changes, such as to have people (staff) able to understand and use AI better. There may be a need to broaden the focus on wider economic challenges that influence public debt sustainability, such as a systemic risks unit.

As national IFIs are invited as observers at various meetings organized by DG ECFIN, they could have a similar observer status at meetings of national bodies that deal with macroeconomic/macroprudential risks. And the EFB could get an observer status at ESRB meetings.

5. Getting involved in policy design would be very tricky9

Many national IFIs do not have the capacity to formulate/examine fiscalstructural plans; whether AI would allow them to perform effectively in this respect is an open issue, but clearly not over the short and medium term.

Although AI would bolster national IFIs' capacity, it would not entitle them to have claims on formulating public policies. Because there is an inherent conflict of interest here and it would undermine democratic policy-making; they can influence, however, policy indirectly. In addition, IFIs are not flawless in their recommendations, and too deep policy involvement incurs reputational risks. One should not overblow the role of national IFIs; fiscal responsibility devolves basically to government policies, and the latter cannot be put on an automatic pilot.

6. Al and fiscal rules

It is unquestionable that fiscal rules are needed in the EU, not least because the euro area lacks key constructs of a monetary union. In the EU, it is not the lack of AI that impedes the introduction of risk sharing instruments — such as a fiscal capacity, EDIS, a safe asset. Macroprudential rules are also needed. **But AI could hardly be a substitute for human judgement in overhauling fiscal rules.**

National IFIs should not shun thinking about fiscal rules; most of them consider that such a topic is "political" par excellence and adopt a non-committal stance, which is intellectually unpalatable.

⁹ What the EC Communication of November 2022 suggested was very tricky and the EC and the Council directives of 2023 rightly dropped this task. National IFIs should stay as watchdogs of fiscal policy rectitude.

Annex: Al cannot prevent financial crises¹⁰

Al can amplify "herd behavior" even if new technologies, algorithms, process much more information (big data), and the models used by banks and investment funds to manage risks would be increasingly sophisticated.

Al cannot eliminate contagion in markets, which is a form of chain reaction, a "herd effect", and it often necessitates state intervention (by the central bank) as a lender of last resort. This was seen in the United Kingdom in 2022 after misguided decisions by the Truss government, which affected the stability of the pension system; it was also seen in the United States with the fall of Silicon Valley Bank and other turbulence in the banking system, which compelled the Fed to intervene through new lines of financial assistance and revision of regulations.

No matter how much we would like to believe that AI can improve internal prudence and optimize decisions at the microeconomic level, it is worth considering that: a/ decisions cannot be entirely put on autopilot (and even if they were, it still wouldn't solve the issue of avoiding critical moments, crises) and b/micro-level rationality does not ensure macro-level stability because of compounded effects leading to fluctuations in economic activity, panic.

Al cannot eliminate the distinction between micro and macro, with theoretical and practical implications. Individual and firm-level behaviors can be rational (pursuing net gain in relation to various constraints, including ecological ones), increasingly less subject to emotions through the use of algorithms (AI), while economic activity cannot avoid economic fluctuations, whether small or large in scale. The question is whether there is a basis for central authority (government, central bank) to intervene in attempting to reduce significant fluctuations, stabilize economic activity, and prevent large-scale crises. If the answer is yes, then it can be discussed whether such interventions can be assisted by AI.

And thus, one arrives at macroeconomic models and forecasts, rules and principles used by governments and central banks, by international financial organizations – by governments in formulating budgetary policies, by central banks in designing monetary and macroprudential policies, by international financial organizations and interstate groups as facilitators of policy coordination among states (e.g., the G20 had such a role in the collective response to the Global Financial Crisis).

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¹⁰ Excerpts from Daniel Dăianu, "Al cannot prevent financial crises", Romanian Fiscal Council, February, 2024.

Central banks have long been granted operational independence to avoid being influenced by whims and pressures from governments. The presumption is that decision-makers adhere to sound standards of policy conduct for a central bank. It is worth repeating that this does not mean that central banks operate with magic tools, not least because there are nontrivial uncertainties in monetary theory and practice, and often the sagacity and experience of decision-makers come into play, that can make a difference.

The emergence of independent fiscal councils (national IFIs) in OECD countries, in the EU (especially after the sovereign debt crisis), aims to ensure that principles of fiscal prudence are adhered to by governments, thereby promoting the sustainability of public debts. However, it should be noted that from the standpoint of a country's financial situation, private indebtedness is no less important than public indebtedness. Balance of payments crises thoroughly prove this. Consider also that in the US, in EU countries, etc., public budgets have taken over private debts (of banks) to save financial systems, apart from unconventional operations by central banks. Furthermore, fiscal rules are not God given; they must be adapted according to circumstances.

Financialization has exacerbated economic instability, speculative behavior, and economic inequalities; it has increased fragility and favored major financial crises, which have required interventions by states and central banks, leading to the socialization of losses. Lesser instability in economies would require a definancialization, and simplification, as the increasing complexity of financial systems does not foster economic stability.

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¹ The author bears sole responsibility for this text.