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## **POLICY BRIEF**

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# A post-growth society for the 21st century

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This *Policy Brief* gives the key findings of the study "A post-growth society for the 21st century", published in November 2013 by IDDRI.

Is there a bright future ahead for economic growth in industrialised societies? Or are these economies doomed, even beyond the present crisis, to grow less rapidly in the upcoming decades, for reasons of demography, energy, or the nature of technological innovation? IDDRI's study shows that controversies over the future of growth abound and the uncertainties surrounding it are high.

The scenario of structurally weak growth is difficult to imagine as, in political discourses, growth is often equated with prosperity. Without growth, a society seems bound to implode and break down. Yet the study shows that adapting to very low growth rates does not necessarily mean abandoning the objectives pursued by public authorities with respect to employment and the reduction of inequalities in economic terms, social protection or even life satisfaction. However, a low-growth society does imply considerable efforts and trade-offs particularly for redistribution and social protection.

Blind faith in the return of new waves of productivity cannot be the sole response to the uncertainty hanging over long-run growth. One of the biggest political challenges for the beginning of this 21st century involves formulating a positive narrative for a future no longer dependent on growth and able to unfetter itself concretely from such constraints: a post-growth society.

## RECOMMENDATIONS

- Public institutions need to construct low-growth scenarios—for example, based on a 1% growth rate over two decades—to clearly highlight what policy trade-offs would be required, especially concerning compulsory contributions and the workings of social security systems. For instance: in a low-growth economy, what would the share of health spending be in 2025? What options for taxation or health system reform to ensure its financial equilibrium?
- It is up to policy makers not only to develop a positive narrative on a future unshackled from growth but also to clearly state the trade-offs they would promote in the eventuality of structurally weak growth. Programmes of national election candidates should foresee a "Backup Plan" in case of no return to sustained growth.
- The academic research community needs to go further than the analyses presented in this study and address other dimensions of public policy (political system, finance, culture, etc.) and how these link up (or not) with economic growth. This systematic analysis will also help to steer policy trade-offs.

### AN INAUDIBLE DISCOURSE ON GROWTH

Since the 1970s, growth rates in the wealthiest European countries have remained structurally subdued, and Europe is not the only region concerned. Yet, in many discourses, from the rightwing and left-wing alike, growth is presented as a sine qua non of individual and collective prosperity. Prosperity is not only necessary, it is also achievable, provided that we give ourselves the wherewithal. Some policy makers even hope for the return of an economic "Golden Age" or the advent of a new industrial revolution. For the generations born after the thirty-year-long post-war boom who have never known growth rates over 2%, this type of discourse seems outdated.

Authors who develop thinking on the alternatives to growth have not yet found answers to this dissatisfaction. The literature on alternative indicators to GDP discusses the social and environmental objectives that should take precedence, but it often says too little about the role played by GDP growth in reaching these objectives, be it regarding employment, income equality or access to essential services such as health or education.

To respond to the current dissatisfaction with political and media discourse on growth, the study "A post-growth society for the 21st century" draws on a review of the literature, on macroeconomic modelling exercises and organising conferences that bring together practitioners, policy makers and experts, and attempts to answers—as far as possible—the two following questions:

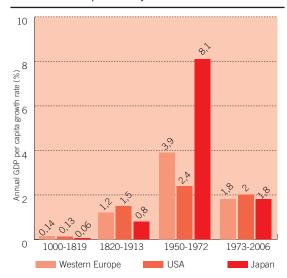
Can we have any certainty about the future of growth?

Assuming that the coming decades will be a period of weak growth, fluctuating for example between a GDP registering a 1% annual growth rate and a stagnant GDP, can we still prosper?

## RADICAL UNCERTAINTIES ABOUT THE FUTURE OF GROWTH

Growth rates over 1% a year are a recent phenomenon in human history (Figure 1), and those seen in the industrialised countries after World War II are something of an exception. Growth is the result of complex mechanisms can be linked to factors such as the tertiarisation of the economy, the diffusion of new technologies with strong transformative potential, energy and the social compromise. Faced with the complexity of the phenomenon, economists are admittedly unable to make robust forecasts for economic growth stretching over several decades.

**Figure 1.** Growth rates for world production per capita from 1000 to the present day



Source: Maddison (2001, layout by authors).

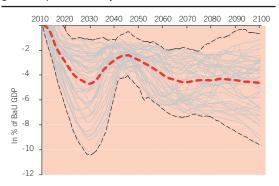
In most rich countries, economic growth has been declining over that last forty years. The bulk of this decrease can be explained by the end of the economic catching-up that had taken place during the post-war boom, a time when Europe and Japan rebuilt their economies after two world wars and developed new modes of consumption and production, such as Fordism or Toyotism.

The situation of weak growth could well persist, or become even weaker, for at least four reasons:

- I. First, the tertiarisation of the industrialised economies helps to drive a trend of slackening growth, given that productivity gains are lower in services than in industry. To take the example of the American economist William Baumol, the performance of *Dido and Aeneas* cannot be shortened or it would no longer be the opera that Purcell wrote.
- 2. The ageing of the population reduces the share of working-age individuals in total population and also limits the productive capacity of an economy, and thus its growth rates. In the OECD member countries, population ageing currently causes a drop in growth of around 0.7 percentage point compared to the 1950s.
- 3. The new information and communication technologies (NICTs) with their growth potential are harbingers of hope. However, despite the radical changes they have brought to our daily lives, their effect on economic activity is hardly visible in the statistics. For some authors, the NICTs are not drivers of a new wave of accelerated growth, compared to the landmark innovations (electricity, steam engine) of previous industrial revolutions.

I. "A post-growth society for the 21st century. Does prosperity have to wait for the return of economic growth?", Demailly, D., Chancel, L., Waisman, H., Guivarch, C., Study No. 08/2013, Iddri.

**Figure 2.** The impact of an energy transition trajectory on growth depends on many factors.



Source: simulation using IMACLIM.

Reading: the grey line shows the worldwide cost of a given development trajectory relative to a business-as-usual scenario. All the trajectories manage to limit carbon emissions in line with the EU's 2050 climate targets. But each trajectory does so in a different way, with different assumptions on technology innovation, public policy (e.g. developing public transport networks) or changes in behaviour patterns. The dashed line indicates the average of the 432 trajectories.

4. So can we place our bets on the industrial benefits of a green transition? Taking into account the limits of energy resources and the need to contain temperature rises on a planetary scale could reduce the potential for growth a little further. When it comes to accessing natural resources, the European Union is particularly badly off: its energy dependency rate exceeds 70%; the EU possesses no rare earths and is one of the world's leading consumers of agricultural land in third countries. If its current rhythms of natural resource consumption continue, with no discoveries of new resources or no changes in production techniques and behaviour patterns, the EU and the world economy will find themselves facing severe shortages. There is nothing new in this, but a reminder of the figures does underline the urgent need to transform our industrialised economies and societies.

## **ECONOMIC GROWTH AND THE ENERGY TRANSITION**

To find out the possible macroeconomic impact of the increasing energy resource scarcity or emissions reduction, the use of an economy-energy-climate model such as IMACLIM, developed at Cired (Centre international de recherche sur l'environnement et le développement), provides valuable insights. This type of model makes it possible to give a detailed representation of the evolutions of energy, physical and economic systems.

The modelling shows that if the most pessimistic assumptions are confirmed (on energy resources, the evolution of low-carbon technology costs or lifestyles), the macroeconomic impact of policies designed to mitigate climate change and/

or energy scarcity would be several tenths of a percentage point of annual growth. Obviously, the numerical results of the models should be treated with caution.

Firstly, because if the most optimistic rather than the most pessimistic assumptions are adopted, the macroeconomic cost becomes practically negligible. Secondly, because these are orders of magnitude and not precise predictions, and the confidence that someone has in these orders of magnitude depends on the confidence they have in the way IMACLIM represents the interactions between the economy, energy and climate.<sup>2</sup>

There is thus "radical" uncertainty about the future of economic growth. There is uncertainty as tot our future policy choices (will we prefer personal services to robotised services? Will we decide to protect biodiversity?) and the technologies that might be invented in the coming years. This opens up a large range of possible economic futures with an equivalent number of growth outcomes. And the eventuality of low growth rates floundering around 1%, or even lower, is not to be excluded.

#### **CAN WE PROSPER WITHOUT GROWTH?**

## **Happiness and employment**

The links between growth and prosperity are much weaker than is generally supposed. In the long run, there is no link between self-reported happiness and the level of income once a certain threshold has been exceeded, since the 1970s in France. Beyond this threshold, economic growth does not appear to enhance individual well-being (Figure 3). In terms of employment, there also seems to be no link between a country's average growth rate and its unemployment rate in the medium and long term (Figure 4).

## **Inequality and social protection**

In the areas of inequality and social protection, prolonged weak growth complicates the decision-makers' task, insofar is it tends to widen income inequality over the long run – and yet greater equity seems to be crucial for self-reported happiness and the effectiveness of healthcare systems. This means that a low-growth society needs to redouble its efforts when it comes to reducing inequality.

Similarly, we observe that weak growth complicates the trade-offs required to secure the funding of the state pension systems: without growth, it

Note that, in this study, we do not include the economic impact of policies other than climate policy, like biodiversity conservation for example, or the impact of major climate disruptions on economic activity.

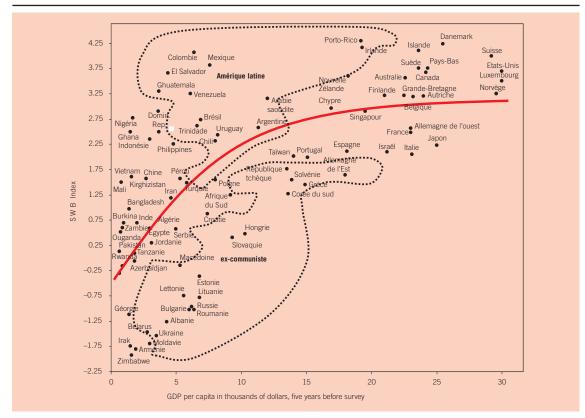


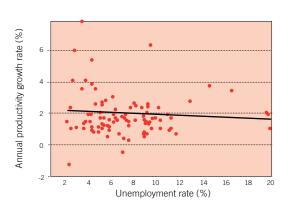
Figure 3. Beyond a certain level of income exceeded in EU countries, growth is not correlated to happiness.

Source: Inglehart et al. (2008).

is necessary to find new sources of contributions and/or work longer and/or decrease pensions relatively. The same holds for the health sector: with a rising demand for health care in a low-growth context, the need arises to increase contributions and/or cut expenditures and/or radically reform the system. Ultimately, without a "bubble of oxygen" from growth, we need more reforms, more political action.

Nonetheless, whether it is a matter of reducing inequalities or reforming the social protection system, a weak-growth context acts as a powerful brake on policy. Since the "pie" is not growing as fast as it used to, it is intuitively more difficult to modify the distribution of wealth between workers and rentiers, between workers and non-workers, or arbitrate collectively between public and private health services. A weaker growth regime thus imposes more trade-offs and makes them even more politically sensitive.

**Figure 4.** There is no correlation between the average growth rate and unemployment rate in the medium term



Note: the relationship between the productivity growth rate and the average annual unemployment rate in 20 OECD countries, for the period 1985-2009. The variables are averaged in 5-year periods.

Source: Cahuc et al. (2014).

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