

Potential growth over the medium term

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Executive summary

Potential growth is a key parameter in public finance programming, as it is the best forecast of GDP growth in the medium term, and therefore determines the intrinsic evolution of public revenues to be included in the associated scenario.

Its estimate over a medium-term horizon, such as that of the next public finance programming bill (LPFP), can take as a starting point the dynamics that would be deduced from the extension of the trends observed before the crisis for the factors of production. This “mechanical” forecast leads to a reference potential growth trajectory of around 0.8 % per year in the forecast.

Furthermore, the inclusion of the effects of policies to enhance job growth (CICE [competitiveness and employment tax credit], responsibility pact), which supported employment and growth but somewhat slowed productivity before the crisis, results in an increase in the potential growth forecast (+0.1 point).

Implementation of the pension reform announced by the President of the Republic during the presidential campaign could raise potential growth by 0.15 point per year over the next few years.

Other structural reforms, either coming into effect over the projection period or gaining momentum, would help support potential growth, but it is not possible to say whether this support would be stronger or weaker in the forecast than in previous years. Their effects therefore represent a contingency of indeterminate sign on the potential growth forecast.

All in all, these elements suggest a medium-term potential growth scenario close to 1 % per year, slightly more or less depending on the assumption made regarding the implementation of the pension reform announced during the presidential campaign. This scenario is affected by the substantial uncertainties surrounding the assessment of the underlying dynamics of the factors of production, and the effects of public policies on these factors, but which can play out both upwards and downwards.

Moreover, this potential growth scenario is surrounded by two major negative contingencies, which are difficult to quantify: firstly, the occurrence of a new crisis which, like the last few crises,

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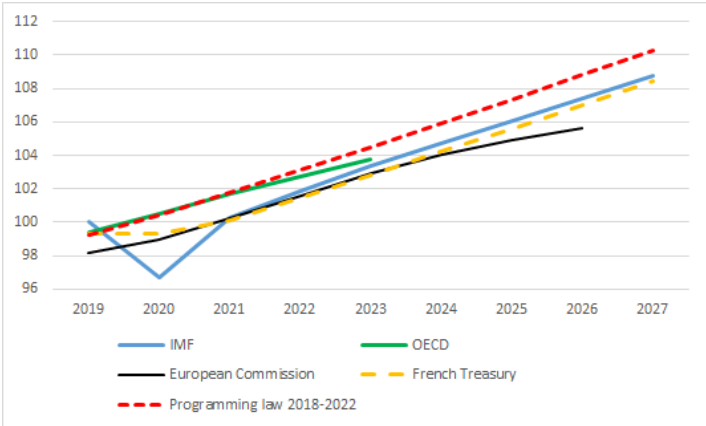
would further reduce potential growth, cannot a priori be ruled out; secondly, the constraints affecting the French economy that can be identified today (the weight of public and private debt, the deterioration in the quality of workforce training, the scars of the crisis on the productive sector, the consequences of the ecological transition) could adversely affect potential growth, if the public policies put in place are not sufficient to correct them over the forecast horizon.

Conversely, the loss of labour productivity observed so far could, if it were to be at least partly reversed over the forecast horizon, push up potential growth.

Potential growth plays a major role in multi-annual budgetary programming, as it determines actual real GDP growth, excluding short-term variations related to the economic cycle². These are reflected in the output gap, i.e. the difference between potential and actual GDP.

Both the government and international organisations consider that, in early 2022, actual GDP is likely to be close to potential GDP³, which is below its LPFP 2018-2022 trajectory. The DG Treasury (Directorate General of the Treasury), in the economic, social and financial report annexed to the budget bill for 2022, estimated that the health crisis would sustainably reduce potential GDP by around 1¼ point of GDP, compared to the LPFP 2018-2022 trajectory. International organisations also present in their latest publications lower potential GDP trajectories than the LPFP 2018-2022 trend for the coming years, although they apprehend the consequences of the crisis using different methodologies.

Graph 1: potential GDP trajectories of the DG-Treasury, international organisations compared to the LPFP 2018-2022 trajectory (base 100 for actual GDP in 2019)



Source: Permanent Secretariat of the HCFP based on the latest publications of the institutions

This research report examines the assessment of potential growth that can be made over a medium-term horizon, such as that of the future public finance programming bill (LPFP), i.e. 2027, using the production function methodology, which, with some variations, is the one used by international organisations and the Government, notably within the framework of the LPFP 2018-2022. This breaks down potential growth into three factors (total factor productivity, labour, capital) and estimates a potential dynamic for each of them.

First, an assessment is made of the pre-crisis potential GDP dynamics (I), then this is extended in the forecast taking into account the effects of public policies and contingencies (II).

I. Over the pre-crisis period, potential growth slightly below the LPFP 2018-2022 forecast of 1.25 %

According to the production function methodology, GDP can be broken down into two observable factors, measured by the national accounts, capital stock (K) and labour, defined as the total volume of hours worked in the economy (L), and a third factor that is deduced in accounting terms from the other two, total factor productivity (TFP).

² See report from the HCFP Secretariat : *PIB et croissance potentiels, définition et enjeux pour les finances publiques (potential GDP and growth, definition and issues for public finances)*, September 2021, <https://www.hcfp.fr/notes-methodologiques/macro-economie>.

³ The output gap for 2022 is estimated at -0.5 point by the IMF (April 2022), 0 by the Commission (May 2022), -2 points by the OECD (June 2022) and -0.5 point by the Government in the PLF for 2022.

$$\log(GDP) = \log(TFP) + 0.65 \log(L) + 0.35 \log(K)$$

The impact of the labour factor on GDP, which under certain conditions corresponds to the wage share in value added, is set at 65 %, i.e. the wage share in value added in France over the long term. The impact of capital is deduced, under the same conditions, at 35 %.

Potential growth, defined as the permanent component of GDP growth, is calculated as the sum of the contributions of the permanent components of the three factors estimated separately: TFP (1.1), labour (1.2) and capital (1.3).

1.1. Total factor productivity

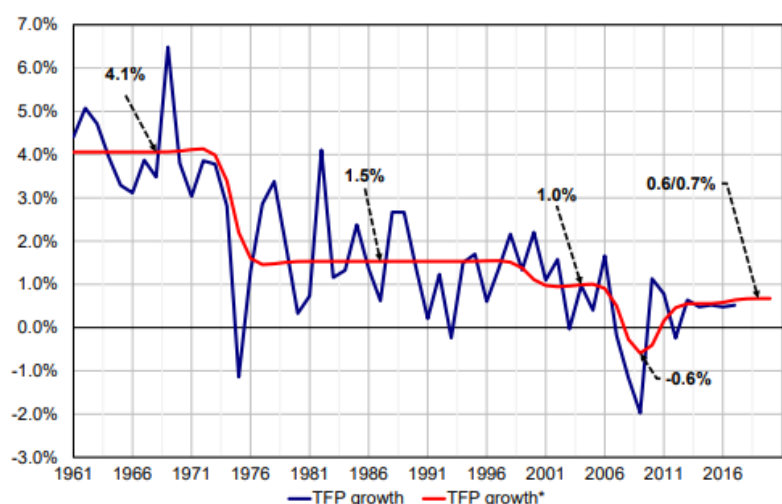
Total Factor Productivity (TFP) is calculated as the difference between GDP and the capital (K) and labour (L) inputs:

$$\log(TFP) = \log(GDP) - 0.35 \log(K) - 0.65 \log(L)$$

TFP is sensitive to the business cycle: it varies in particular according to the usage rate of the capital input and labour input. Trend TFP, which is not observed, reflects the accumulation of productivity gains in the economy, particularly as a result of the dissemination of technical progress.

The estimation of trend TFP can be done using different techniques. In the DG Treasury methodology used for the LPFP 2018-2022, the estimation of trend TFP is based, for the past period, on a statistical filtering method to identify the most significant breaks in the trend, with trend TFP growth then being modelled by a staircase curve. This methodology amounts to considering that fluctuations in TFP are only cyclical in nature, with the exception of the most significant macroeconomic shocks leading to a lasting change in trend (1970s crisis, slowdown in the early 2000s, 2009 crisis).

Graph 2: DG Treasury's estimation of trend TFP in 2017



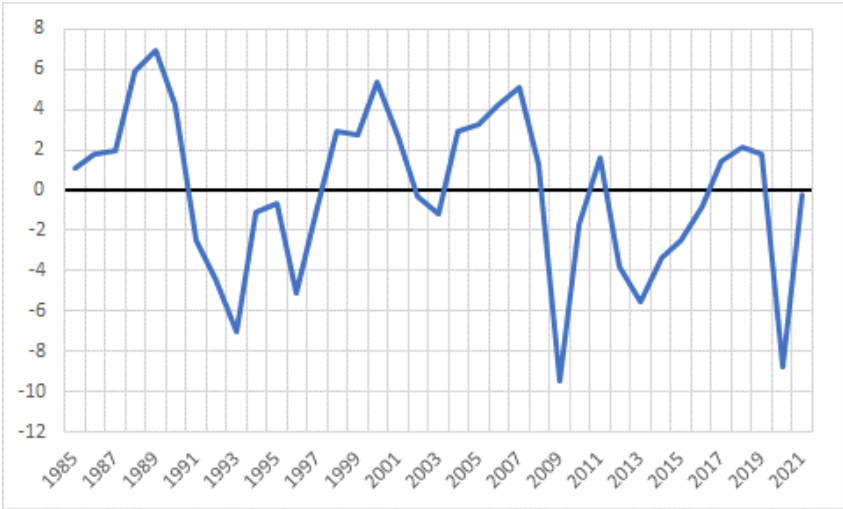
Source: INSEE, DG Trésor estimates.

Source: DG Treasury, Trésor-Economics No. 206 - La croissance potentielle en France (potential growth in France), 2017

For the most recent period, statistical filtering is made less relevant by the fact that it is difficult, due to the lack of hindsight, to distinguish fluctuations of a cyclical nature from more lasting trend changes. In particular, the years 2017 to 2019 were marked by strong growth, partly cyclical in nature, and statistical filtering methods attribute part of the resulting cyclical increase in TFP to the trend. An

approach that is less prone to these difficulties is to use an exogenous business cycle indicator to adjust TFP for its cyclical component and derive its trend component.

Graph 3: production capacity utilisation indicator calculated using business surveys



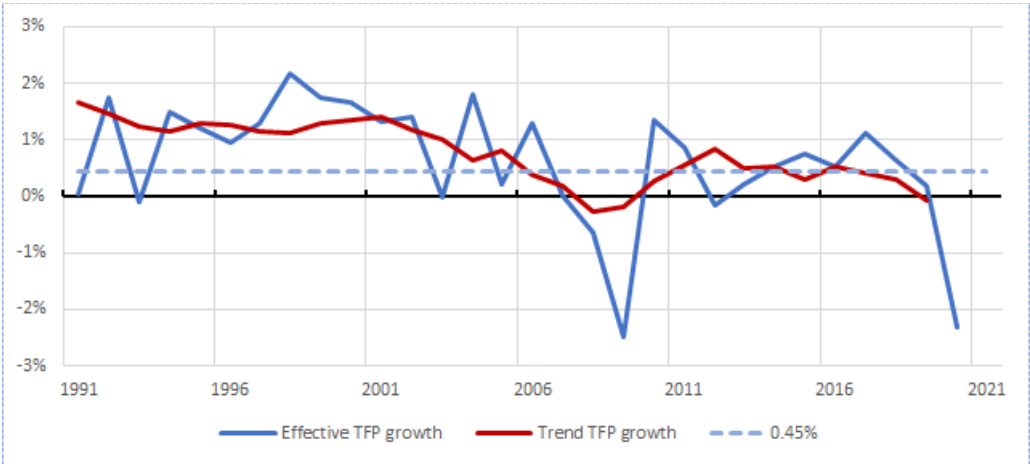
Note for the reader: a positive value for the indicator reflects a level of use of the economy’s productive capacities above the long-term average, a negative value a lower level.

Source: European Commission, indicator CUBS (for capacity utilization based on business surveys), calculated on the basis of business surveys weighted by the sectors’ share of the economy’s value added. See the CUBS methodology here: https://ec.europa.eu/economy_finance/publications/economic_paper/2014/ecp535_en.htm

This can be done by using a production capacity utilisation indicator constructed from business surveys, such as the one calculated by the European Commission for its own assessment of potential growth (see graph 3). The latter has the interesting characteristics of being available over a fairly long period of time and of being little revised over time.

The resulting trend growth of TFP follows, like that estimated by the DG Treasury, a downward trend over the long term, with a decline in momentum after 2000 and after 2010. Its fluctuations reflect shocks to TFP growth that are not attributable to the business cycle, but the resulting chronicle is less smooth than that provided by the DG Treasury’s estimate, with, for example, a more marked slowdown in TFP in the 2000s.

Graph 4: TFP and trend TFP obtained with the capacity utilisation indicator



Explanatory note: the red curve corresponds to the trend component of actual TFP (blue curve) estimated from the economy’s production capacity utilisation indicator, smoothed over three years.

TFP growth adjusted for business cycle effects remains volatile. Its average growth rate can be calculated over a period corresponding to a full business cycle, i.e. 2012-2017, 2012-2018 or 2012-2019, with the last three years at comparable levels of capacity utilisation in the economy, and close to that observed in 2011, at the time of the last cycle high point (see graph 3). On this basis, it is estimated that, **over the pre-crisis period, the growth of trend TFP would be between 0.4 and 0.5 point per year.** It would therefore be **lower than the range of 0.6 to 0.7 point of the DG Treasury for the LPFP 2018-2022.** Taking into account the data after 2017, and in particular the very strong job creation between 2017 and 2019, leads to lower cyclically adjusted TFP growth than expected at the time of the Treasury’s estimate, for comparable actual growth.

It should be noted, however, that between 2008 and 2011 and in 2020-2021, TFP growth is closer to 0: not taking these years into account when assessing potential TFP growth is tantamount to considering that these are exceptional events (a financial crisis and a health crisis) that are not likely to recur in the future. If, however, TFP growth were to be estimated by including the financial crisis or health crisis period in the estimation period, trend TFP growth would fall to around 0.3 point (average trend TFP over the period 2007-2019 or 2012-2020).

1.2. The labour factor

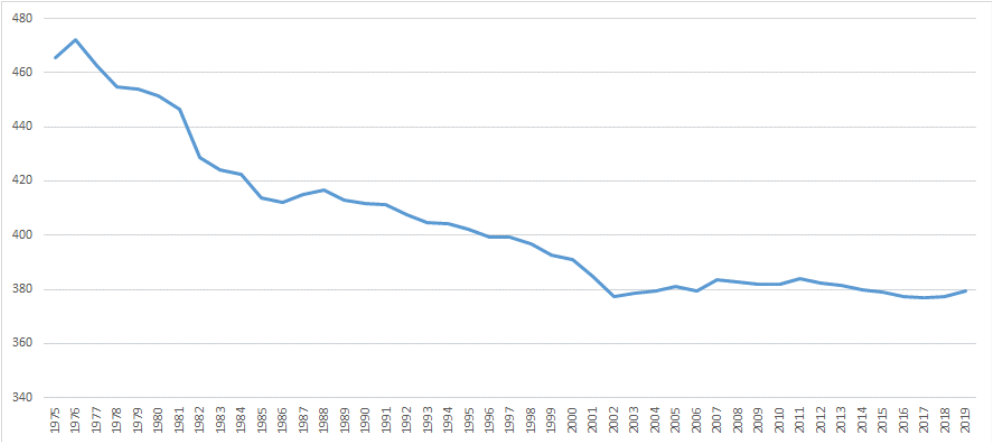
In the DG Treasury methodology, the permanent component of labour, defined as the total volume of hours worked in the economy over a year, is estimated in two steps:

Firstly, hours worked are broken down, on an accounting basis, into hours worked per capita and employed people, as defined in the national accounts.

$$hours\ worked = hours\ per\ capita * employed\ people$$

Hours worked per capita have been decreasing slightly over the last 10 years (between -0.1 % and 0 % per year), with the slight increase observed in 2018 and 2019 possibly resulting from policies to exempt overtime from tax, the effects of a favourable economic climate, or a more structural change in behaviour. They can be considered stable for the estimation of potential growth in the pre-crisis period.

Graph 5: hours worked per capita over the long term, for the whole economy



Source: Insee, national accounts

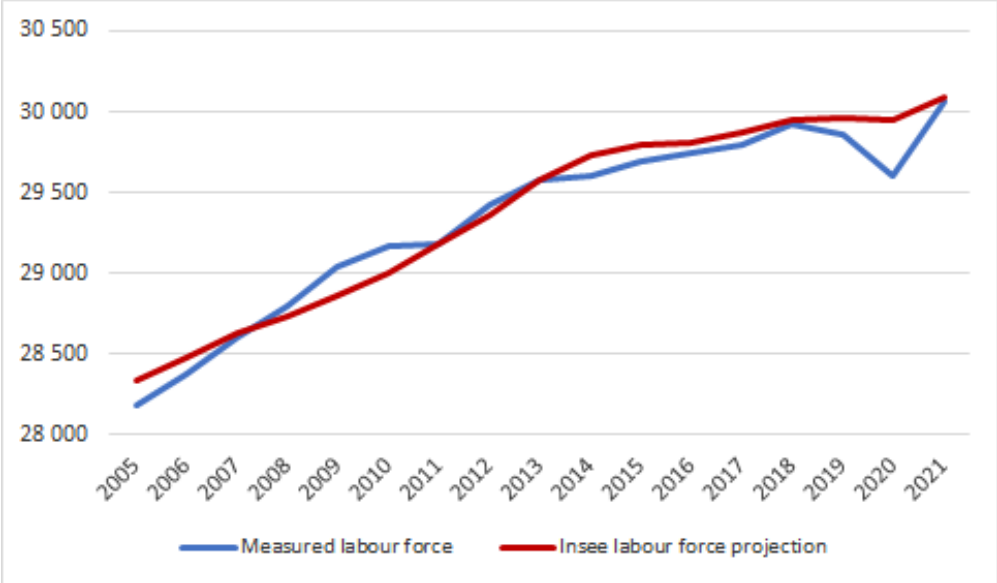
Secondly, employed people is broken down into two components, a demographic component (labour force) and a component measuring the equilibrium of the labour market (the proportion of the labour force that is not unemployed, i.e. the complement to 1 of the unemployment rate):

$$\text{Employed people} = \text{labour force} * (1 - \text{unemployment rate})$$

Although these two indicators are not derived from the national accounts, this breakdown provides a good approximation of the national accounts employment growth rate over the medium term.

The trend in the labour force, excluding the effect of the economic cycle, is taken from Insee simulations published on 30 June 2022. Its growth is between 0.1 and 0.2 point per year on average over the years preceding the crisis (2016-2019, the labour force having slowed considerably compared to the first half of the decade).

Graph 6: observed labour force and Insee’s long-term projection

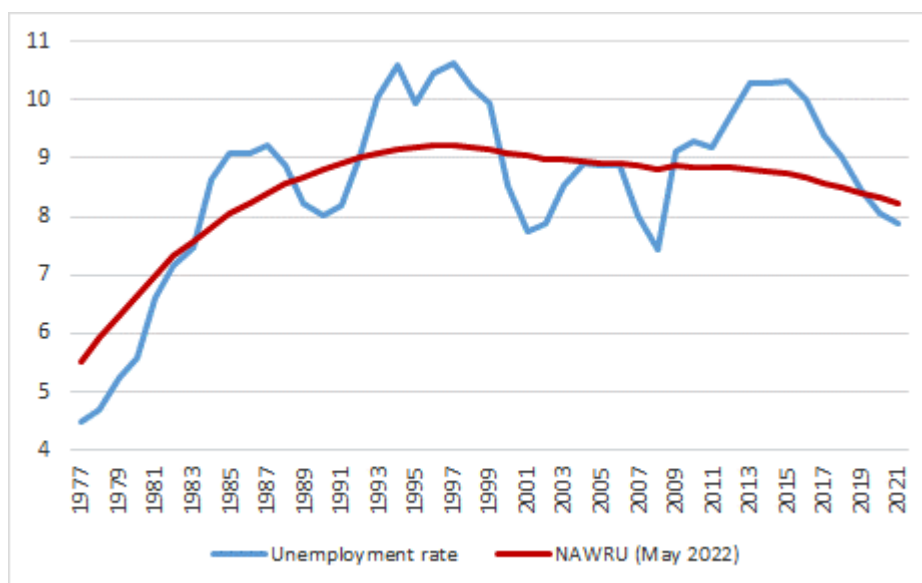


Source: Insee labour force projection, June 2022

The proportion of the labour force that is not unemployed is partly the result of cyclical factors and partly the result of structural factors, related to the functioning of the labour market. The structural component of the unemployment rate is an unobserved variable, which the DG Treasury has approximated by the NAWRU estimate made by the European Commission; the NAWRU (non-accelerating wage rate of unemployment) is the level of the unemployment rate that does not lead to upward or downward wage pressures.

If, like the DG Treasury, we use the European Commission’s NAWRU estimate, we deduce an increase in the proportion of the labour force that is not unemployed of around 0.1 point per year on average during the period 2012-2019, whereas it was stagnant during the previous decade.

Graph 7: Unemployment rate and NAWRU estimate published by the European Commission in May 2022



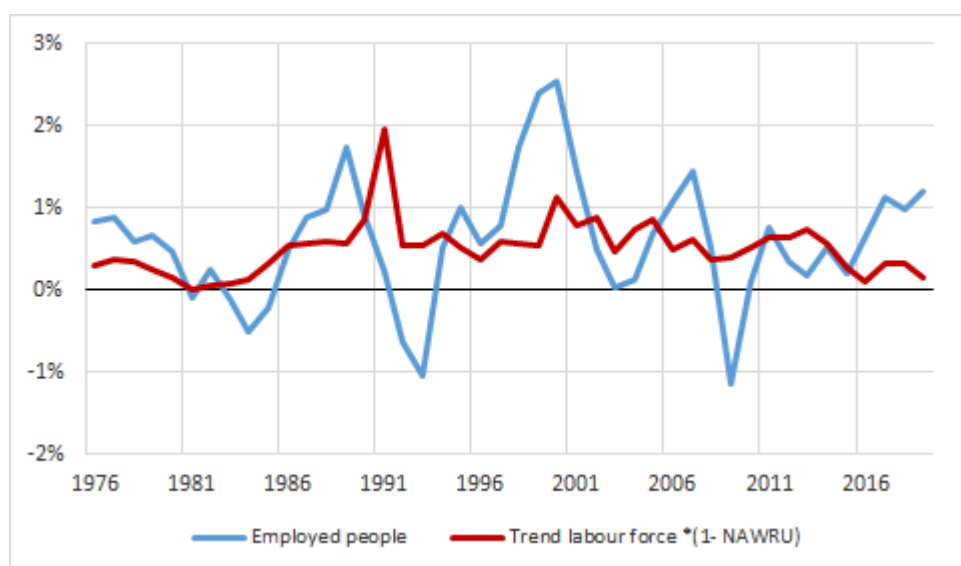
Source: Insee, European Commission

The fall in structural unemployment estimated by the European Commission (-120,000 people between 2012 and 2019) is significantly less than the expected effect of the deployment of massive policies to enhance job growth (CICE and “Responsibility pact”), which is estimated at between 300,000 and 500,000 job creations between 2012 and 2019, according to the evaluations available⁴. This discrepancy may reflect the presence of other factors that would have offset the effects of employment policies on structural unemployment, or reflect an underestimation of the decline in structural unemployment by the European Commission, or the fact that these estimates are too optimistic. The consequences on the potential growth projection, discussed in the following section, may differ depending on the interpretation adopted.

The above estimates for the labour force and the proportion of employed people in trend employment lead to a much lower increase in trend employment than the increase in observed employment over the period 2017-2019 (0.25 % to 0.35 % per year compared to more than 1 % per year). The growth gap between trend and observed employment is nevertheless expected in view of the favourable economic situation and the size of this gap is comparable with that observed in previous business cycle tops (end of the 1980s, end of the 1990s, 2006-2007).

⁴ See Staff report 2022-01 from the HCFP Secretariat: *La productivité du travail au sortir de la crise sanitaire (labour productivity in the aftermath of the health crisis)*, March 2022, <https://www.hcfp.fr/node/216>.

Graph 8: evolution of employed people and trend employment (annual growth as a %)



Source: author

All in all, the permanent component of the total volume of hours worked would have changed over the pre-crisis period by around 0.3 point per year, i.e. a contribution of hours worked to potential growth of around 0.2 point, which corresponds to the upper limit of the DG Treasury's range for the LPFP 2018-2022 (0.1 to 0.2 point).

1.3. The capital factor

The permanent component of capital is the capital stock as measured by national accounting. This convention amounts to saying that the capital stock corresponds to the potential capital available in the economy. The higher or lower level of capital utilisation over the business cycle is captured in total factor productivity.

Capital growth averaged around 1.3 point per year between 2012 and 2019 and 1.5 point in 2018 and 2019, i.e. a capital contribution of around 0.45 and 0.5 point respectively. This represents a contribution around 0.2 point higher than the contribution which would result from a stabilisation of the capital to potential GDP ratio. The increase in the capital-to-GDP ratio could be temporary, related to the favourable economic conditions of the late 2010s, or it could reflect a more sustainable dynamic, resulting for example from a relative decline in the price of capital.

All in all, the above analysis leads to an estimate of potential growth of around 1.05 % to 1.2 % per year before the crisis, which is slightly lower than the potential growth recorded in the LPFP (1.25 %), confirmed in the revised potential framework of the PLFs for 2021 and 2022.

The difference between the two measures is mainly in total factor productivity which, once the effects of the cycle are taken into account, would have increased less strongly than in the DG Treasury's forecast for the LPFP 2018-2022. Conversely, the contribution of labour and capital tend to be at the higher end of the expected range, due respectively to lower structural unemployment and strong investment growth before the crisis.

Table 1: comparison of potential growth in the LPFP 2018-2022 and the estimate in this report for the pre-crisis period

	Estimate in this report	LPFP 2018-2022
Contribution of total factor productivity	0.40 to 0.50	0.6 to 0.7
Capital contribution	0.45 to 0.50	0.5
Labour contribution	0.20	0.1 to 0.2
Estimated potential growth (total)	1.05 to 1.20	1.25

Source: author and LPFP 2018-2022

II. Over the medium term, a central estimate of potential growth of around 1%, slightly lower or higher depending on the degree of implementation of the pension reform

In order to project potential growth over the period 2023-2027, the approach adopted here starts from a “mechanical” forecast, which consists of retaining Insee’s current labour force projections and extrapolating the other determinants of potential growth to their pre-crisis values (2.1), and then adjusts this mechanical evolution for specific factors that may affect these determinants, such as the impact of employment policies on the pre-crisis TFP growth measure and on the evolution of structural unemployment in the forecast (2.2), the impact of other structural reforms (2.3) and the inclusion of contingencies related to the risk of a future crisis and the structural weaknesses of the French economy (2.4), in order to deduce a central scenario of potential growth with unchanged legislation on the retirement age (2.5), or assuming a shift of 4 months per year in the legal age, as announced during the presidential campaign (2.6)

2.1. A “mechanical” baseline forecast of potential growth of around 0.8 %

A “mechanical” forecast of potential growth for the period 2023-2027 based on the production function methodology consists of extending it by taking into account Insee’s labour force projections and extrapolating the other determinants of potential growth from their pre-crisis evolutions:

- The labour force would be stable between 2022 and 2027, i.e. a significant slowdown compared to the pre-crisis dynamics, accentuated in the latest labour force projections published by Insee in June 2022 compared to previous projections (see inset);
- The NAWRU is assumed to be constant;
- Hours worked per capita are assumed to be stable, with the trend decline of the last decade halted in 2018 and 2019;
- With regard to the capital to potential GDP ratio, there are two possible hypotheses: either to keep it constant in accordance with its long-term behaviour, or to continue to make it grow faster than potential GDP as was observed before the crisis;
- Trend TFP growth is extended to its pre-crisis value, i.e. growth of between 0.4 and 0.5 point per year;

All in all, potential growth would then be estimated at:

- 0.62 % per year using the lower end of the estimated range of trend TFP growth (0.4 point per year) and the assumption of a stable capital to potential GDP ratio;
- 0.97 % per year using the higher end of the estimated range of trend TFP growth (0.5 point per year) and the assumption of an increase in the capital to potential GDP ratio, providing an additional contribution of 0.2 point.

The central reference scenario would therefore be potential growth of around 0.8% per year in the forecast.

A more marked slowdown in the labour force in the new Insee projections

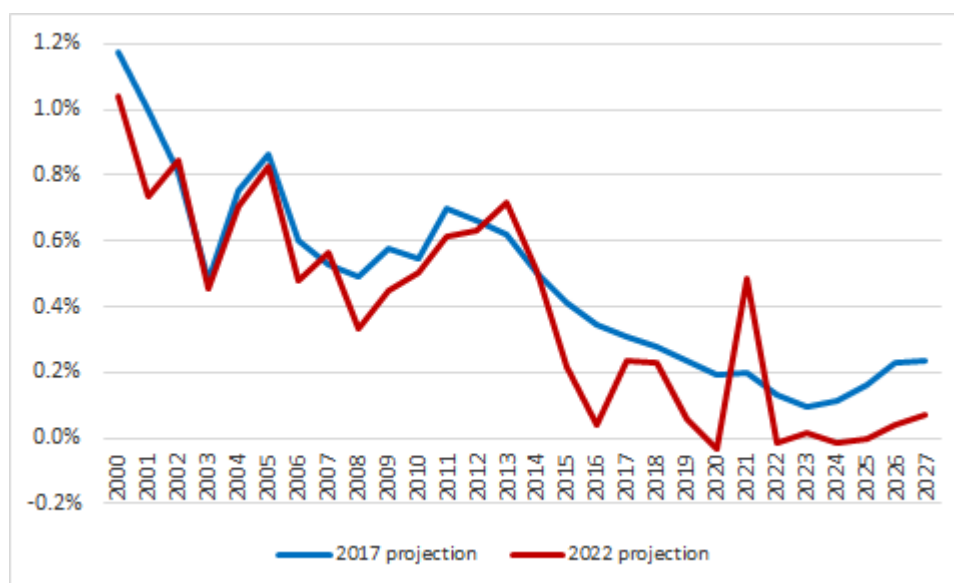
On 30 June 2022, Insee published new labour force projections to 2070, the previous ones dating from 2017.

In these new projections, growth in the labour force would be weaker over the entire projection period, after being weaker than expected before the crisis (with growth of 0.17 % per year from 2017 to 2019 compared with 0.27 % predicted in the previous projections dating from 2017).

Over the period 2022-2027, growth in the labour force would be nil, whereas it was predicted to be around 0.17 % per year in the projections dating from 2017.

All in all, the slowdown in the labour force would reduce potential growth by nearly 0.2 point over the period 2022-2027 compared with its pre-crisis rate.

Graph 9 : comparison of Insee labor force growth projections in 2017 and 2022



Source: Insee labour force projections, June 2022 and May 2017

Note for the reader: the strong increase in the labour force in 2021 (+0.5%) is the result of a rebound effect after the decline in 2020 due to the health crisis and the effects of policies to support activity, particularly for young people (“1 young person, 1 solution” scheme, measures to support work-linked training).

2.2. Positive impact of the inclusion of policies to enhance job growth on the estimation of trend TFP and the evolution of structural unemployment

Over the previous decades, France implemented several successive policies (lower social security contributions on low wages, recruitment bonuses for specific groups, etc.) aimed at integrating the employees furthest away from the labour market, whose productivity is generally below average. These policies to enhance job growth have had the effect of reducing apparent labour productivity, while increasing potential growth as they gain momentum, via the reduction in the NAWRU made possible by the return to employment of the target groups.

If we limit ourselves to the main policies to enhance job growth implemented before the crisis, i.e. the CICE from 2013 transformed into a permanent reduction in contributions in 2019, and the cuts in charges under the Responsibility Pact from 2014 onwards, the expected *ex-ante* impact of these policies could be evaluated within a range of between 1 and 1.5 point of GDP and 2 to 3 points of employment, and the impact on growth was expected to materialise mainly before 2020.

In the forecast, the effects of these policies on potential growth could be more or less important depending on how much of the total impact has already materialised in the past, and how long it would take for their impact to fully materialise, both of which are unknown. In particular, the effects of the CICE may have only partly materialised before the crisis, as it was a tax credit that was reimbursed with a delay and not a reduction in charges that directly affected labour costs. Under this assumption, the transformation in 2019 of the CICE into a permanent reduction in social security contributions would lead to further favourable effects on employment and potential GDP in the forecast.

Since the NAWRU estimated by the Commission has decreased less than the expected *ex-ante* and estimated *ex-post* effects of these policies (*see above*), it is necessary to make an assumption about the significance of this difference in order to derive a forecast of the impact of these policies on NAWRU and trend TFP in the forecast:

- either the pre-crisis decline in NAWRU is underestimated and the impact of these policies in the pre-crisis period was close to what was expected: in this case, TFP could be raised by around 0.1 point in the forecast, and, given its impact on the capital stock, potential growth by around 0.15 point, while the NAWRU would stabilise;
- or the pre-crisis decline in NAWRU was correctly estimated, but reflects weaker effects of employment policies than expected and they would have already largely materialised; in this case, the adjustment to be made to trend TFP in the forecast could be halved (0.05 point, i.e. potential growth raised by 0.075 point), while the NAWRU would stabilise;
- or the pre-crisis decline in NAWRU was correctly estimated, but reflects slower than expected employment policy effects; as a result, apparent TFP growth would remain at the same level as before the crisis and the decline in NAWRU would also extend in the forecast, at the same rate as before the crisis, helping to support potential growth by 0.1 point per year.

In conclusion, the inclusion of the effects of employment policies in the various scenarios above could lead to an increase in potential growth of 0.07 to 0.15 point in the forecast, i.e. a central assumption of around 0.1 point.

2.3. Uncertainties related to the effect of structural reforms

Over the forecast horizon, several structural reforms could support potential growth, apart from the pension reform and policies to enhance job growth addressed previously. These include reforms to the labour market, unemployment insurance, vocational training, capital taxation, corporate tax and the Pacte law, which were implemented before the crisis. To this should be added the effects of the recovery plan, the France 2030 investment plan, as well as measures to promote competitiveness and innovation announced during the presidential campaign (including the abolition of the CVAE [company value-added contribution]).

While the implementation of structural reforms would provide support to potential growth over the forecast horizon, it is not possible to say whether this support will be greater or less than the support to pre-crisis potential growth provided by the structural reforms that were gaining momentum at the time.

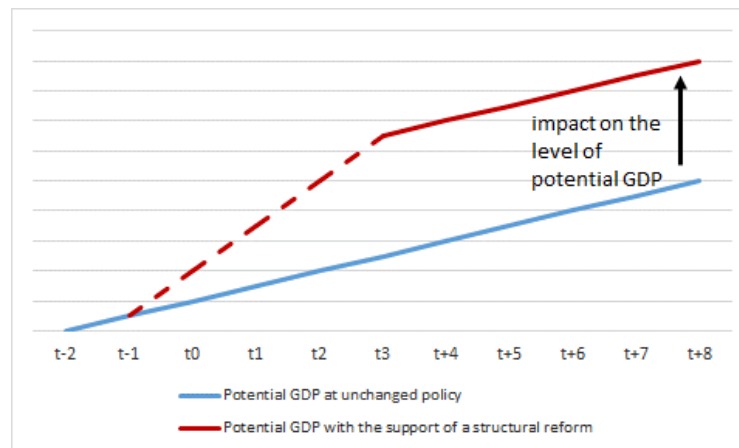
However, the assessment of the determinants of potential growth presented in the first part and extended in the forecast includes the effects of structural reforms on pre-crisis potential growth. On the one hand, the above-mentioned reforms, implemented in the years preceding the crisis, have in some cases already had an impact on the determinants of pre-crisis potential growth. On the other hand, the delayed effects of earlier reforms may have continued to operate during this period.

All in all, the net additional impact of structural reforms on forecast growth, compared to the pre-crisis trend, is by nature very uncertain and its sign itself is impossible to determine. Consequently, they must be treated as a contingency, of indeterminate sign, affecting the forecast.

The effects of public policies on potential growth and GDP

Public policies affect potential growth when they directly affect one of the factors or the structure of the economy.

Graph 10: illustration of the impact of a public policy to support growth on potential GDP



Source: author

Note for the reader: a public policy allows for a sustainable increase in the potential GDP trajectory (solid red curve). During a certain period, potential growth is slightly higher (red dashed line).

While it cannot be ruled out that some public policies may permanently support potential growth (and therefore increasingly potential GDP), the most general case is that of support for potential GDP in terms of level.

Since the increase in potential GDP due to a public policy takes some time to materialise, it results in a temporary increase in potential growth. In practice, the extent of the support provided by a public policy to potential GDP and the length of time it takes to materialise are highly uncertain, but can be approximated, for some of them, by orders of magnitude derived from macroeconomic models or evaluations of public policies implemented in the past.

In the forecast, the public policies that support potential growth are those whose impact on potential GDP will increase, and these are often the most recent policies. Some public policies, which supported potential growth in the past, no longer support it in the forecast because their effect on potential GDP has already fully materialised. Moreover, the exact timing of the effects of reforms on potential growth is itself very uncertain: it is possible that some effects are very early, by acting on the expectations of economic agents, while other effects may take longer to appear.

2.4. Risks mostly tilted to the downside

A first negative contingency refers to the risk of a future crisis occurring. The potential growth forecast in this report assumes the normal functioning of the economy, compatible with the continuation of the intrinsic dynamics of the factors of production and the effects of public policies consistent with past experience. However, the last few decades have been marked by regular crises of varying severity, leading twice since 2000 to a significant fall in potential growth (in 2008-2009 and probably in 2020-2021) during the crisis period. Accordingly, TFP growth averaged 0.4-0.5 point over the years 2012-2019, but averaged 0.2-0.3 point over the period 2008-2019, which includes the 2008-2009 crisis. Taking into account the risk of a new crisis, which is difficult to quantify but in any case impossible to rule out, would lead a priori to a reduction of a few tenths in the potential growth expected on average over the coming years.

A second negative contingency refers to the consideration of well-identified structural weaknesses, which the public policies in place can at best only partially correct over the forecast horizon. The high level of public and private debt could therefore hamper investment and innovation in a context of probable tightening of financing conditions as a result of the ECB's actions to combat the current surge in inflation. A loss of human capital as a result of the crisis (due to disruptions in the education system as a whole, but also due to changes in working conditions), which would not be fully compensated for by the support and stimulus measures, could dampen productivity. Moreover, while short-time working and integration measures, notably the "1 young person, 1 solution" scheme, have supported employment during the crisis, phasing them out could be accompanied by a decline in the labour force⁵. Finally, the ecological transition entails a risk of downgrading existing capital, which would limit capital's contribution to potential growth and could adversely affect, at least in the short term, trend TFP⁶.

Conversely, the loss of labour productivity observed so far could be a positive contingency. Provided that it is not called into question by the final national accounts data, it would amount to around

⁵ The stimulus measures for the professional integration of young people ("1 young person, 1 solution" scheme) have helped to support the number of work-linked training contracts, particularly apprenticeships. These represent 240,000 job creations between 2019 and mid-2022, i.e. around 1.4% of non-agricultural market paid employment. It is assumed that these measures will end as planned at the end of 2022: potential growth in 2027 would not be affected by these measures unless they lead to an overestimation of potential GDP in 2022, through their impact on the labour force.

⁶ By directing innovation towards less carbon-intensive technologies rather than productivity-enhancing technologies.

1.5 point at the end of 2021 according to the estimate of the permanent secretariat of the High Council, and would have increased by the beginning of 2022. In the event that the loss of productivity is partially or fully absorbed over the forecast horizon, which is not a given, potential growth would be temporarily boosted.

Furthermore, although it is not possible to rule out a priori the occurrence of other positive contingencies that could support potential growth, whether it be the implementation of new policies that are more favourable to growth or the dissemination of technological innovations in the economy, such as the beneficial effects related to the generalisation of teleworking, their impact on potential growth is by definition very uncertain.

2.5. All in all, a central scenario of potential growth, without pension reform, close to 0.9 % and downside risks

During the election campaign, the President of the Republic announced that he wanted to implement a pension reform that would include a gradual increase in the legal retirement age to 65. Given the uncertainties currently affecting the implementation of this reform, two polar scenarios are presented here: the first, presented in this section, is a scenario with constant legislation, without pension reform; the second, presented in the following section, assumes the implementation, from 2023 onwards, of a shift of 4 months per year in the legal retirement age⁷.

With the current retirement age maintained, a central scenario can be obtained from the above assessments by taking the middle of the range considered for the reference trajectory and taking into account the impact of employment policies.

Table 2: central forecast potential growth scenario

	“Central” scenario
Reference trajectory	0.8
Adjustment of the effects of employment policies	0.1
Total	0.9

Source: author

This scenario is marred by the uncertainty surrounding the assessment of the underlying dynamics of factors of production, and the effects of public policies on these factors.

Moreover, the risks on the dynamics of the factors of production tend to be downside risks, because these estimates do not include the risk of the occurrence of a future crisis or the identified obstacles affecting the French economy (scars of the crisis, debt, deterioration of human capital, consequences of the ecological transition).

⁷ A postponement of the legal retirement age to 64, as was also mentioned during the presidential campaign, would lead to a reduction of the implementation period to six years (instead of nine years for a postponement to 65), with the same rate of postponement of the legal age (four months per year). It can be estimated that the impact of this change on the growth of the labour force would be small over the period 2023-2027, although it would ultimately lead to less support for potential GDP. However, a late implementation of the reform would delay the support to potential growth compared to the forecast in this report.

2.6. A pension reform, as announced during the presidential campaign, would lead to an increase in the labour force, raising potential growth by 0.15 point

If the pension reform announced in the presidential programme were implemented quickly, it could have a positive impact on potential growth over the period 2023-2027 by increasing the labour force.

According to estimates by the DG Treasury for the Pension Orientation Council (COR), raising the retirement age by 4 months per year would lead to an increase in potential growth of around 0.15 point per year over the period of the increase.

In this scenario, potential growth would be slightly higher than 1% per year

Table 3: forecast potential growth scenario if the announced pension reform is implemented

	“Central” scenario with pension reform
Reference trajectory	0.8
Adjustment of the effects of employment policies	0.1
Effect of the pension reform	0.15
Rounded total	1.05

Source: author

Conclusion

The analysis elements gathered in this report lead us to estimate that, over the next five years, the potential growth of the French economy will be close to 1 % per year, slightly lower or higher depending on the degree of implementation of the pension reform announced in the presidential campaign. This scenario is affected by the substantial uncertainties surrounding the assessment of the underlying dynamics of the factors of production, and the effects of public policies on these factors, but which can play out both upwards and downwards.