

Mauritius Inc.: Raising our potential output trajectory

March 2023



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BACKGROUND

Three years after the unprecedented shock triggered by the COVID-19 pandemic, the Mauritian economy continues its recovery path at a gradual, albeit more moderate pace relative to peers, with most countries in the latter group having already returned to their 2019 levels in real terms by last year. Real GDP growth in Mauritius is projected at around 5% in 2023 (see Box I) in line with latest IMF forecasts. Whilst the ongoing technical rebound in the domestic economy is encouraging considering the challenging operating environment, it is worth noting that the country's long-term potential growth rate – defined as the path leading to the highest level of economic activity that can be sustained by means of the available technology and factors of production, notably labour and capital, without creating inflationary pressures – has been on a downtrend during the past decades, with the extent of the fall therein estimated to have been contextually exacerbated by the significant fallout of the pandemic. In fact, the crisis is likely to have had lasting effects on potential GDP worldwide, affecting both advanced economies and emerging markets. Coming back to Mauritius, after standing at above 6% in the mid 1980s and 1990s, potential GDP growth has undergone a progressive weakening, reaching 4.2% during the 2000s and dropping below 3.5% prior to the onset of the crisis before falling further in the aftermath thereof. Whilst potential output growth can be expected to fall over time as an economy pursues its development process, converging towards advanced economies, in line with the catch-up hypothesis, the pace and magnitude of the drop in Mauritius during the last decade or so – which is analysed in this report – may have been compounded by a lack of structural reforms.

The afore-mentioned downtrend calls for close attention insofar as the growth in potential GDP is a key determinant of an economy's ability to grow in a sustainable way over the longer run and achieve its socio-economic objectives. Potential output is therefore an important indicator for policymaking and planning. In contrast, actual GDP growth only provides a snapshot of an economy's performance for the current and near term. Moving forward, whilst the potential growth rate in Mauritius is as per our computations, set to rebound from the heavy blow emanating from the crisis in line with the pickup in economic activities locally and abroad, it is, on a current state scenario, projected to remain below its pre-COVID rate on an average basis during the coming decade, thus complicating the task for achieving our development aspirations over the medium to long-term. To this end and in view of challenges arising, *inter alia*, from the projected ageing of the country's population, it is deemed crucial that, alongside ensuring a sustainable GDP growth path, a package of structural reforms that are adapted to the local context and market dynamics abroad be put in place to address our productivity and competitiveness shortcomings as well as buttress our resilience to external shocks. This should assist in rekindling our potential in support of our socio-economic welfare.

Box I: Updated forecasts for Mauritius in 2023

International landscape

Whilst the latest World Economic Outlook Update issued by the IMF at the end of January is slightly less gloomy than the Fund's October 2022 projections, notably on the back of China's reopening and falling energy prices, the global economic environment is set to remain challenging amidst the enduring ramifications of the war in Ukraine and the impact of interest rate hikes to fight inflation. Global growth is poised to slow from 3.4% in 2022 to 2.9% this year – 0.2 percentage point higher than predicted in October – before rebounding marginally to 3.1% next year, albeit remaining well below the historical average of 3.8% seen during the period 2000-19. While China and India would generate half of the global growth for 2023, economic conditions across the key export markets of the Mauritian economy are set to remain difficult. The euro area narrowly escaped a recession during the final quarter of last year with France growing at a meagre 0.1% while Germany reported a contraction of 0.4%. At the same time, core inflation remains high in the Eurozone with higher rates placing a strain on mortgage demand. The UK economy is forecast to contract this year on account of the ramifications of the rise in natural gas prices and a labour market that is yet to regain pre-COVID levels while growth in South Africa has been cut amidst low external demand, power shortages and structural constraints.

Outlook for Mauritius

The domestic economy registered a technical rebound last year, driven essentially by a pickup in tourism which accounted directly for over 50% of the economic growth outcome. For 2023, notwithstanding the testing conditions in our main markets, the domestic economy is set to continue its recovery path, supported mainly by a further upturn in tourism and the continuing good performance in financial services and ICT. We also expect nationwide investment to be upheld by the execution of large infrastructure projects, property development ventures and initiatives geared towards the development of new growth segments like renewable energy and pharmaceutical. Overall, we expect real GDP growth to be around 5% this year in line with latest IMF projections, thus implying that the country would return close to its pre-pandemic level in constant rupee terms but would, however, be still below 2019 levels by some 9% in USD terms. Besides, the balance of risks remains tilted to the downside in view of global uncertainties along with the potential ramifications of higher interest rates and the prolonged inflationary pressures. In fact, the annual average headline inflation in Mauritius, which attained 11.1% in January last, should remain stickier than previously anticipated in coming months after factoring in: (i) the still high commodity and energy prices globally as compared to historical levels; (ii) the hikes in vegetable prices following the bad weather conditions; (iii) the rise in tariffs applicable to electricity consumption locally; and (iv) pressures on the currency since the beginning of the year. A gradual decline is projected in the latter part of 2023, with our updated baseline scenario pointing to headline inflation hovering around 6% by December 2023, barring major shocks, e.g., linked to commodity prices and currency dynamics. On another note, whilst remaining elevated, a relative narrowing of the structural trade and current account deficits as a % of GDP is foreseen this year on the back of the projected lessening of the import bill while sustained capital and financial flows should support the balance of payment surplus, although the protracted volatility worldwide especially amidst the tightening of financial conditions would require monitoring.

Sources: IMF WEO January 2023, Statistics Mauritius and MCB Staff estimates

Figure 1**Evolution of potential GDP growth in Mauritius (5-year average)**

Note: (i) The estimate for the period 2015-19 has been adjusted to factor in the revised data issued in the wake of the rebasing of National Accounts

Sources: Statistics Mauritius and MCB staff estimates

SCOPE AND METHODOLOGY OF THE REPORT

This paper provides an assessment of potential output in Mauritius and makes the case for uplifting the country's long-term economic potential as a key axis for fostering our sustainable progress and prosperity. The document begins by exploring the concept of potential output, encompassing the literature on its economic importance, the measurement techniques and limitations. It then examines the evolution of potential GDP in Mauritius with focus on the trends characterising its structural drivers including labour market dynamics, capital investment and total factor productivity. Finally, the report sheds light on policy options to lift potential growth by focusing on those that could yield optimal gains in Mauritius. To underpin suggestions made in this document, the report is guided by specific measures and postures embraced by various countries on the international scale. In the course of its analysis, the report leverages national and international statistical databases while resorting to empirical references and models to appraise the evolution and forecast the future path of potential GDP in Mauritius. The report is neither prescriptive in its essence nor exhaustive in its contents. While acknowledging policies already being implemented by the authorities over the years, the report aims to take part in the thinking for boosting the country's potential.

DEFINITION AND SIGNIFICANCE

Potential output or potential GDP is the most important determinant of an economy’s long-term prospects and, hence, constitutes a critical benchmark for the elaboration of policy measures in any country, irrespective of its state of economic development. Broadly speaking, potential output is a measure of the sustainable productive capacity of an economy. Representing the supply side of an economy, it is defined in IMF publications as “the maximum output an economy can sustain without generating a rise in inflation”. Figure 2 discusses the key features of potential GDP and how the concept relates to other measures of output in an economy. Importantly, the deviation of actual output from potential output in the short term – called the output gap – sheds light on the state of the business cycle and gauges potential inflationary pressures and as such, informs policymakers on the need for more or less monetary and fiscal stimulus.

Figure 2 Potential GDP and other output measures

Potential output is one of several important measures of output that are monitored by macroeconomists and policymakers



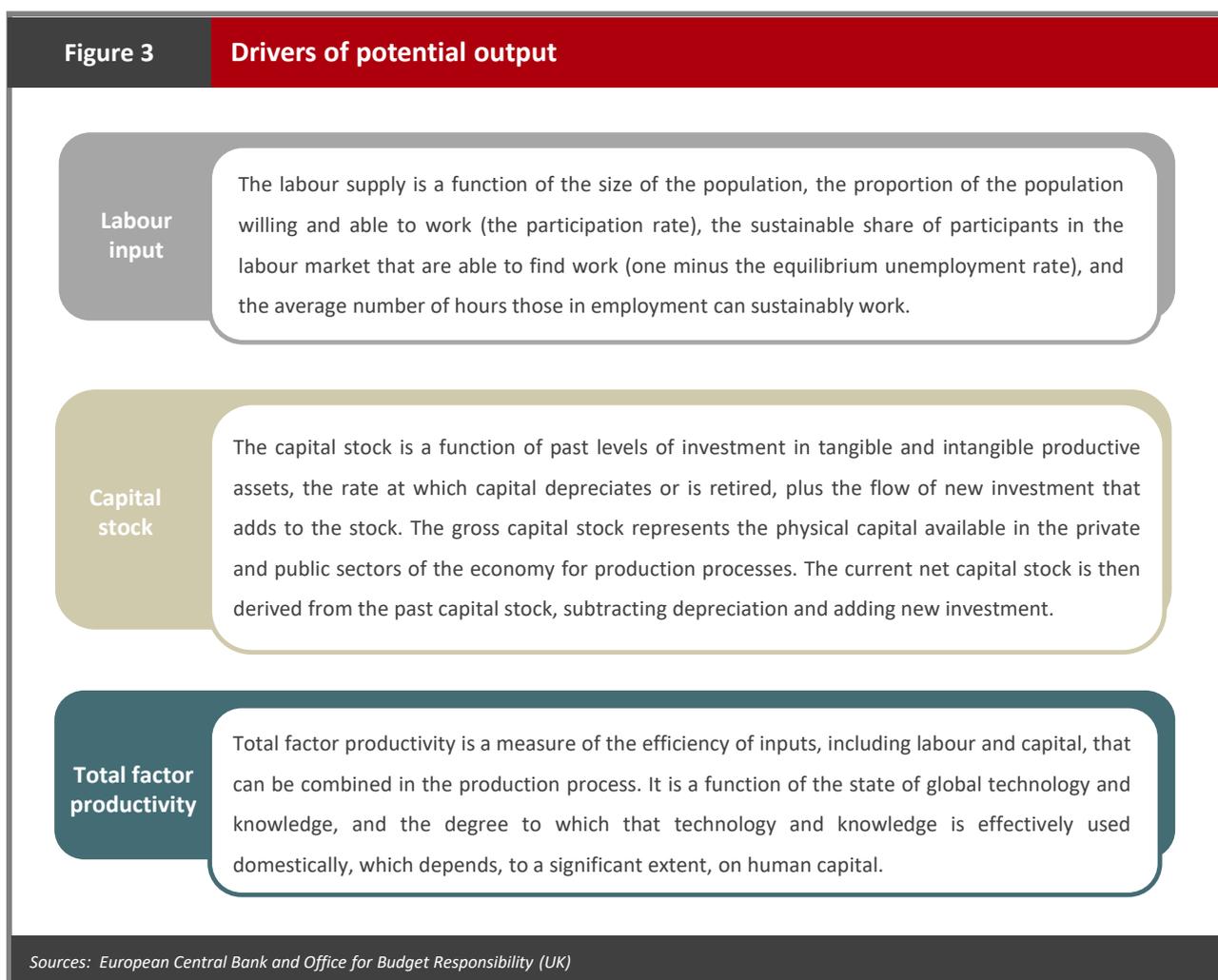
Definition

- **Potential output** (also commonly referred to as ‘potential GDP’ or ‘productive potential’ or ‘supply potential’ or ‘trend GDP’) is the value of goods and services that an economy can generate when its productive resources – notably labour and capital – are being utilised at their maximum sustainable rates.
- **Output** (or GDP or ‘actual output’) is the total value of all goods and services that are actually produced in the economy over a given period (typically a month, a quarter, or a year)
- **Output gap** is the difference between potential and actual GDP at any point in time. A negative output gap (actual GDP below potential) implies that there is some ‘excess supply’ or ‘slack’ in the economy, with levels of domestic resource utilisation below what can be sustainably deployed. From a theoretical standpoint, negative output gaps are associated with low or falling rates of inflation while positive output gaps are associated with high or rising inflation. A positive output gap, or ‘excess demand’ or ‘overheating’ in the economy, implies that levels of domestic production exceed what can be sustainably produced from resources held domestically.

Source: Office for Budget Responsibility, Briefing Paper No.8, Forecasting Potential Output – The supply side of the economy

DETERMINANTS OF POTENTIAL OUTPUT

Potential output is generally driven by changes in and the efficient allocation of supply-side factors, thereby stressing the pertinence of sound structural policies for the achievement of sustainable growth in the medium to long-term. The main supply-side determinants which are detailed below, include the available factors of production, notably labour and capital, as well as the state of technology. Importantly, a country's long-term economic potential is also influenced by the quality of its institutional set-up, particularly in respect of supporting innovation and factor accumulation as well as the strength of the legal and regulatory framework. In addition, recent crises have indicated that demand-side factors could also have lasting ramifications on potential output, by notably triggering exits from the labour force or erosion of skills.



In a nutshell, an economy's potential growth could pick up on the back of a widening of the working-age share of the population along with an increase in labour force participation rates, which will boost labour supply growth. Likewise, increases in the capital stock emanating from higher investment and higher TFP growth driven by increases in the rate of absorption of new technology amidst higher focus on research and development would also yield a positive contribution on the long-term economic potential.

MEASURING POTENTIAL GDP

Given that potential output cannot be observed directly, it has to be estimated by statistical and econometric methods. There are various approaches to measuring potential output, with each having pitfalls and requiring some degree of judgment as discussed in the next sub-section. Box II below summarises the alternative techniques used in the empirical literature for estimating and forecasting potential output. The approach employed in this paper to estimate potential GDP in Mauritius is also highlighted below.

Box II: Overview of Potential GDP Estimation Techniques

Univariate filters

Potential GDP is obtained by smoothing out fluctuations in actual GDP. This approach is a purely statistical method, which filters the actual GDP data to extract the trend as its estimate of potential output.

Examples of methods commonly used:

- Hodrick Prescott filter
- Baxter-King filter
- Beveridge Nelson decomposition
- Kalman filter

Production function

This approach looks at the supply side of the economy (usually through a Cobb-Douglas production function) and relates potential GDP to the trend components of productivity and the available factor inputs such as labour and capital.

Examples of methods commonly used:

- Full structural model
- Production function with exogenous trends
- Structural VAR

Multivariate filters

This approach takes into account other economic indicators to remove the trend from the cycle. It adds economic structure to estimates by conditioning them on some basic theoretical relationships such as the Philips curve.

Examples of methods commonly used:

- Hodrick Prescott (HPMV)
- Beveridge Nelson decomposition
- Kalman filter

Our approach to modelling the potential output of Mauritius

We leveraged the Cobb-Douglas Production function to estimate the potential output of Mauritius and analyse its drivers, as per the following equation:

$$\bar{Y}_t = \bar{A}_t K_t^\alpha \bar{L}_t^{1-\alpha}$$

Where \bar{Y}_t relates to potential GDP, \bar{A}_t refers to potential total factor productivity, K_t refers to capital input, \bar{L}_t refers to potential labour input, and α refers to output elasticity of capital. In line with the literature and previous IMF research, we use a standard 35 per cent capital share for our model.

Labour Input

Potential labour input in the Cobb-Douglas framework refers to potential employment. Historical potential employment is proxied by applying an Hodrick-Prescott filter on employment data. To incorporate the impact of an ageing population on the labour market, we followed IMF's approach and modelled future potential employment as follows:

$$\bar{L}_t = (1 - \bar{U}_t) W_t \bar{LFP}\bar{R}_t$$

where: \bar{L}_t stands for potential employment, \bar{U}_t for non-accelerating inflation unemployment rate (NAIRU), W_t for the working age population and $\bar{LFP}\bar{R}_t$ for the trend in labour force participation rate. NAIRU and trend labour force participation rate are proxied by applying an Hodrick-Prescott filter on unemployment and labour force participation rate respectively.

Capital Input

In the absence of data on services provided by capital, an estimate of stock of fixed capital is used. Capital refers to the net stock of investment in reproducible fixed assets. Reproducible fixed assets are investments in residential and non-residential building (excluding land), infrastructural work, machinery and equipment. Official statistics for stock of capital was leveraged for the domestic economy.

Total Factor Productivity (TFP)

Total Factor Productivity (TFP) is the portion of output not explained by the amount of inputs used in production. As such, its level is determined by how efficiently and intensely the inputs are utilised in production. Applying the Cobb-Douglas function on GDP, we can derive the evolution of TFP based on the residual of the equation. A Hodrick-Prescott filter is then applied on TFP to obtain estimates of potential TFP.

LIMITATIONS OF METHODS USED IN ESTIMATING POTENTIAL OUTPUT

Irrespective of the methodology employed to measure potential output, the estimates obtained are subject to a fair level of subjectivity in view of the degree of judgment that is attached to the choice of each model while there is an inherent level of uncertainty that stems from such models that are stochastic in nature. Accordingly, while the trends obtained can be viewed with a relatively high level of statistical confidence, point estimates of the output gap have to be treated with some degree of caution as detailed below.

Filtering techniques

The filtering techniques mentioned earlier have drawbacks whereby the estimates are better thought of as ‘trend’ (rather than potential) growth. Univariate filters do not integrate any economic structure and are, therefore, not consistent with the precise drivers of potential output. Instead, univariate filters represent a purely statistical approach to approximating potential output. Moreover, all statistical filters suffer from the well-known ‘end-point’ problems – i.e. their measured trends tend to overemphasise actual data at the start and end of the sample and tend to correlate closely with actual data. This may lead to close-to-zero estimates of the output gap in real time, which then get revised when new data becomes available.

Production function approach

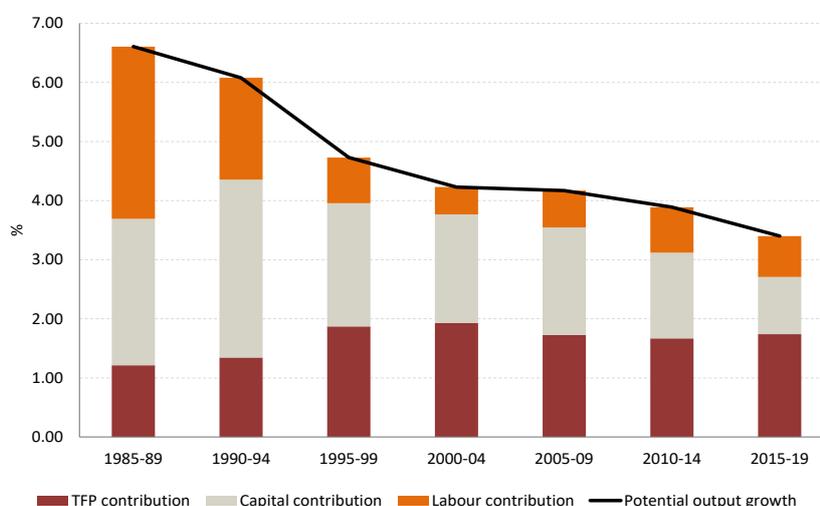
In contrast to the filtering techniques, the production function approach has the benefit of correlating relatively less with actual growth and producing estimates that help explain the movement of potential output in terms of its inputs. The distinct nature of potential growth measured by the production function approach is also reflected in its weak correlation with potential growth based on filtering techniques. The production function approach relies on proxies for potential productivity, potential labour supply growth and capital structural accumulation. However, the approach requires timely access to micro-level data as well as filtering to eliminate short-term fluctuations—for example, to determine the ‘potential’ level of labour, capital investment and total factor productivity available for production—creating problems very similar to the univariate filtering approach and liable to measurement error.

Due to the difficulties incurred in estimating potential output and the output gap, policymakers rely on several other economic indicators to get an accurate health check of the overall capacity pressure in the economy. Some indicators include: employment, capacity utilisation, labour shortages, average hours worked and average hourly earnings, money and credit growth, and inflation relative to expectations.

OVERALL ASSESSMENT

The COVID-19 pandemic triggered the most severe global recession since the end of the Second World War and is expected to leave lasting effects on potential output and key variables such as productivity. Worth noting, growth in potential GDP was, as shown in Box III, already on a declining path worldwide, with the World Bank having, in its Global Economic Prospects of January 2021, highlighted that *“the pre-pandemic decade was marked by weakening momentum in all major drivers of potential growth and a series of growth disappointments. These were broad-based across countries and components of growth”*. Likewise, potential output growth in Mauritius witnessed a downtrend during the past decades, as illustrated in Figure 4 which depicts the evolution of the indicator since 1985. Leveraging the standard Cobb-Douglas production function, this section analyses the driving forces behind this decline. It finds that the drop in potential GDP growth is attributed primarily to a slowdown in growth in labour supply and, to a lesser extent, physical capital. While Mauritius relied heavily on labour in 1985-89, with the latter contributing to nearly 45% of potential growth, changing demographics over time, notably the lower population growth and falling nationwide labour force participation rates, impacted adversely labour supply. This led to a reduction in the contribution of labour to 20% in 2015-19. The decrease in potential growth rate can also be explained by a slowdown in physical capital accumulation, with the contribution of capital reaching 28% in 2015-19, compared to an average of above 40% over the period 1985-2014. For its part, total factor productivity has gained prominence in respect of its contribution to potential output over the aggregate period under review.

Figure 4 Drivers of potential output growth in Mauritius



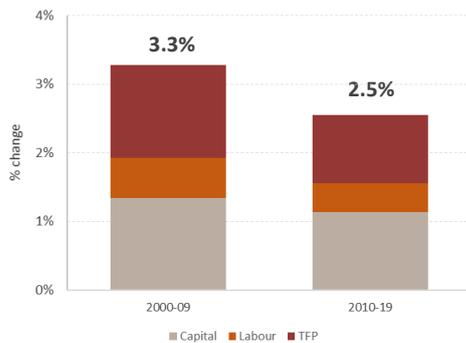
Sources: Statistics Mauritius and MCB staff estimates

Box III: Potential growth on a downtrend worldwide

Even before the pandemic, the potential growth of the global economy was decelerating ...

As per the World Bank's Global Economic Prospects of January 2021, the global economy headed into the COVID-19 pandemic following a decade of slowing potential output growth. The decline in potential growth, notably in the wake of the global financial crisis, was widespread, affecting three-quarters of countries, including two-thirds of emerging markets. Particularly, global potential output growth slowed to 2.5% in 2010-19, well below the previous decade's of 3.3% a year. Almost half of this decline can be attributed to slower TFP growth, slightly more than a quarter to weaker capital accumulation, and the remainder to slower labour supply growth. The decline in potential output worldwide is, as per World Bank and IMF observations, likely to have been worsened by the severe ramifications of the pandemic.

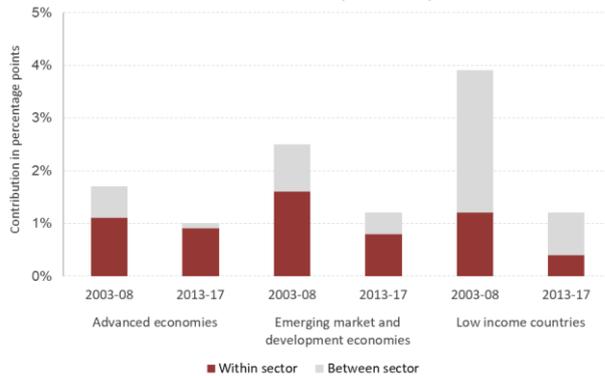
Potential growth of the global economy



According to the World Bank, even before the pandemic, trends in fundamental drivers of growth already suggested that annual average potential output growth would slow by 0.4 percentage points globally over the 2020s. The World Bank estimated that the pandemic would cause the global economy's potential growth to slow by an additional 0.3 percentage points per year in the 2020s.

...driven mainly by lower productivity growth...

Growth in labour productivity

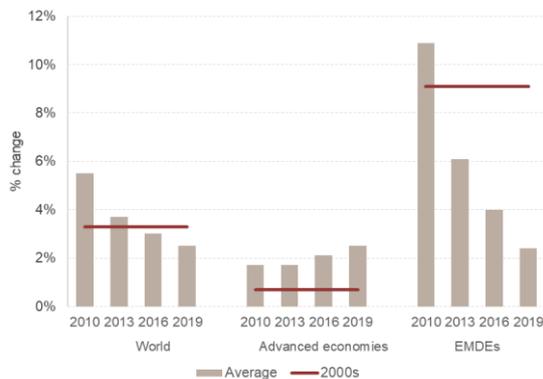


Other major productivity growth drivers were also impacted, on the heels of :

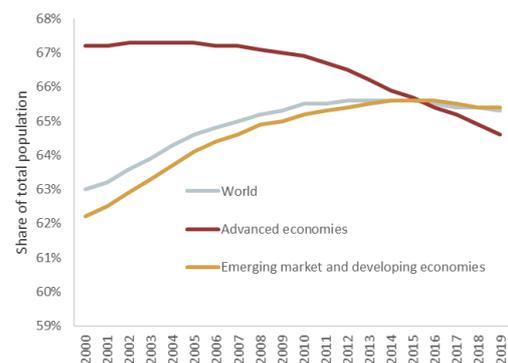
- Gains in life expectancy as well as school achievement and enrollment levelling off;
- Global value chains—a major driver of productivity-enhancing investment and technology transfer—maturing; and
- Governance reform efforts slowing down

...as well as weak investment and working age population growth.

Investment growth



Working age population

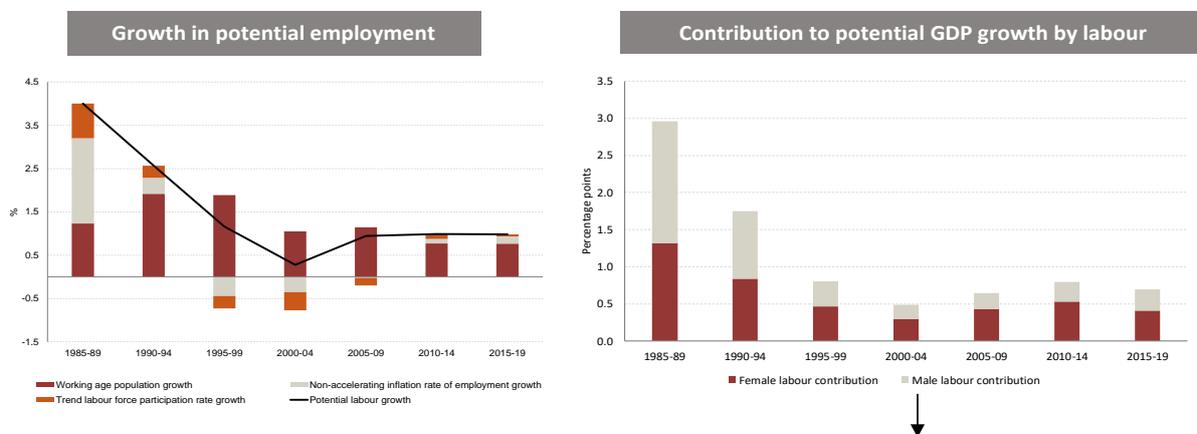


DECOMPOSITION OF POTENTIAL OUTPUT

Labour

As stressed earlier, the contribution of labour to potential GDP in Mauritius has dropped progressively over the years. This reflects the deceleration in the growth in potential employment – computed as the level of structural employment determined by the working-age population, trend labour force participation rate and potential unemployment rate in line with the methodology disclosed in the April 2015 issue of the IMF World Economic Outlook. Indeed, the growth in the working age population, which has been the largest contributor to growth in potential employment over the past decades in Mauritius, has followed a general downtrend over time, slowing from an estimated average of close to 2% between 1990-2000 to below 1% since 2010. This essentially reflects the fall in the general fertility rates, defined as the number of live births occurring in a year per 1,000 women aged (15-49) years, falling by 40% in the period spanning 1985-2019. Moving forward, pressures on the country’s active population are likely to accentuate with the gradual ageing of the population as per official projections, compounded by the difficulties to retain local talents. This stresses the need to boost the recourse to foreign labour alongside increasing women employment. With regard specifically to female employment, whilst their contribution to potential GDP is estimated to be higher than their male counterparts for some periods by virtue of a higher input growth triggered by the low base effects, it is worrying to note that the participation rate of women has plateaued during the past years and remained well below the level in peer nations. At the broader level, reminiscent of the country’s longstanding structural impediments, labour underutilisation, which was already elevated at 27% of the labour force prior to the pandemic, has risen further to 38% in 2021, thus further pressurising the country’s long term potential.

Figure 5 The importance of labour to the potential output of the Mauritian economy



The following equation is used to disaggregate labour and determine the contribution of male and female labour to potential output:

$$\bar{Y}_t = \bar{A}_t K_t^\alpha (\mu \bar{F} + (1 - \mu) \bar{M})^{(1-\alpha)}$$

Where F is female labour input, M is male labour input and μ is the share of women’s labour income in total labour income

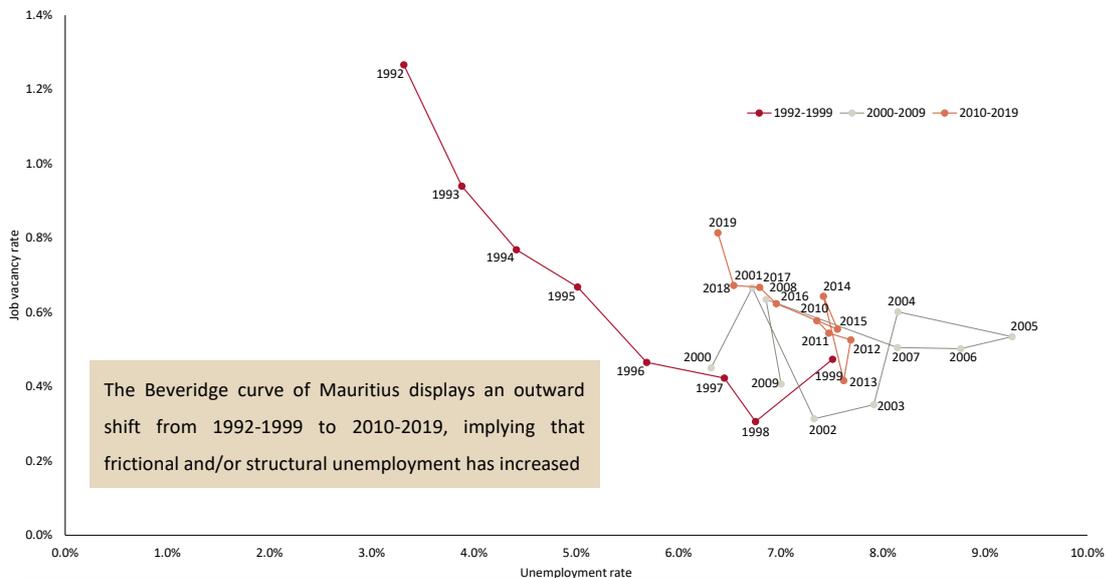
Sources: IMF, Statistics Mauritius and MCB staff estimates

Box IV: Zoom on labour market inefficiencies in Mauritius

Mauritius has long been faced with a sizeable level of labour underutilisation – which incorporates those in potential labour force, the unemployed and those in time and skills-related underemployment. This reflects the existing structural deficiencies in the labour market, including the sub-optimal efficiency of the market to match jobseekers and employers. The latter can be illustrated by way of shifts in the Beveridge curve.

Beveridge curve for Mauritius

Shifts in the Beveridge Curve, which captures the relationship between the unemployment rate and the job vacancy rate, can provide insights on the efficiency of the labour market. An outward movement of the curve, away from the origin, reflects a situation where the number of vacancies remains the same but the unemployment rate is higher, suggesting a lower market efficiency and an increase in frictional and/or structural unemployment. A number of factors may influence the efficiency of the matching process. For example, structural joblessness may increase because of technological advances, changes in demand for goods and services, institutional and policy changes, or lack thereof, or negative changes in the labour force structure, such as an ageing population.



Labour underutilisation

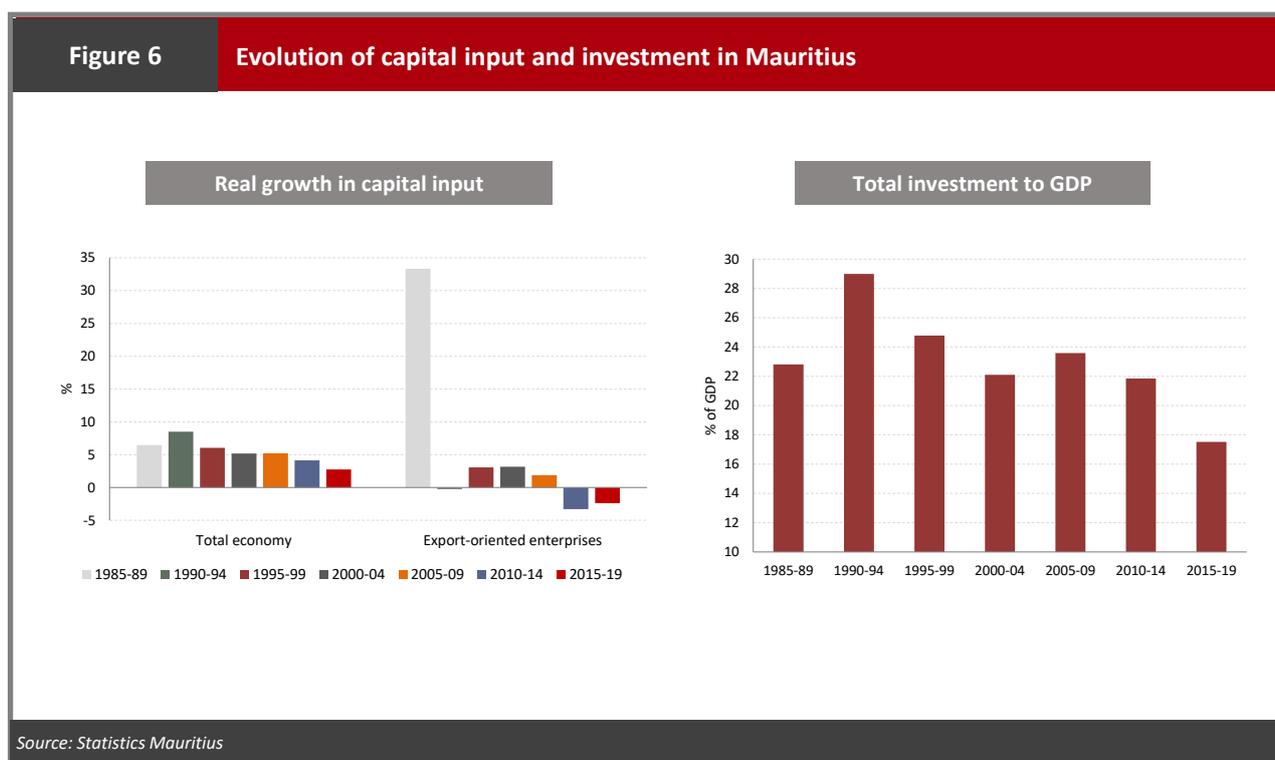
Latest official statistics point to a rise in this category, from 158,000 in 2019 (27% of labour force) to 204,300 in 2021 (38% of labour force), with nearly 70% thereof being in skills-related and time-related underemployment. The magnitude thereof is worrying given that an efficient labour market can positively affect potential output growth directly by increasing the redistribution speed of labour from old sectors to newer, more productive ones. By reducing the time labour spends in sub-optimal jobs and unemployment, an efficient labour market may also indirectly raise the level of human capital in the economy and thus potential output, as workers gain relevant experience and are motivated to invest in more training/education.

Labour underutilisation (2021)	
Unemployed	48,400
Potential labour force	14,900
Skills-related underemployed	48,000
Time-related underemployed	93,000
Total	204,300
<i>Share of labour force(%)</i>	<i>38.3</i>

Source: ECB, Statistics Mauritius and MCB Staff estimates

Capital accumulation

The deceleration in the country’s potential growth rate can also be explained by a declining growth in physical capital accumulation. In fact, average growth in capital for the economy stood at 3% in 2015-19, compared to more than 6% in 1985-89. Of particular concern to the country’s external competitiveness, the extent of the decline is worse when we look at the export-oriented sector, with growth in negative territory in 2015-19 (Figure 6). As a key component of capital input, the share of national investment (i.e., gross fixed capital formation) to GDP has been on a steady decline over the years and is estimated at some 18% in 2015-19, well below its rate of above 20% seen before. Of note, the slowdown in nationwide investment mirrors the dynamics of the savings rate, which also saw its importance diminish over time and is estimated to be 3% of GDP below potential as per the IMF Article IV report for Mauritius issued in 2019. The sluggish pace of investment is expected to have lasting and adverse implications for the country’s long term economic development aspirations. Indeed, productive investment can raise the long-run growth by permanently increasing the returns to factor utilisation. Box V provides a spotlight on the main underpinnings of investment in Mauritius, based on an empirical study by World Bank. In particular, the slowing real GDP growth and FDI inflows for the period ending 2019 could have negatively impacted business opportunities and investment prospects. The World Bank has, in its Country Economic Memorandum of 2021, highlighted that investment in Mauritius “has mainly gone into sectors with relatively low productivity and technological sophistication, most notably real estate”, with negative implications for the country’s potential growth.



Box V: Determinants of investment growth

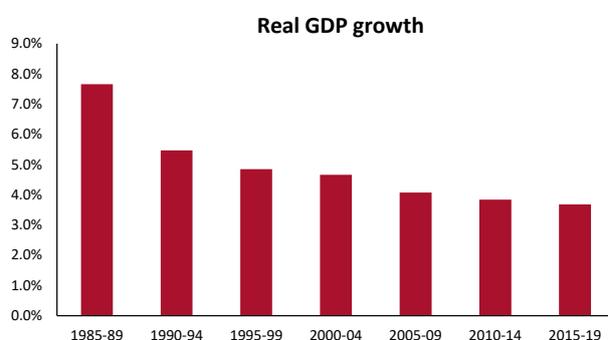
World Bank's empirical framework on the determinants of investment growth

In its Global Economic Prospects of January 2017, the World Bank analysed the impact of macroeconomic factors on investment growth. In particular, the model that they employ includes proxies for the drivers of investment growth, notably the marginal return to capital (e.g., output growth and terms of trade growth) and the risk-adjusted cost of capital (e.g., political uncertainty and financial market uncertainty, FDI inflows, and the private credit-to-GDP ratio). The effect of the relationship between these variables and investment growth are presented to the right.

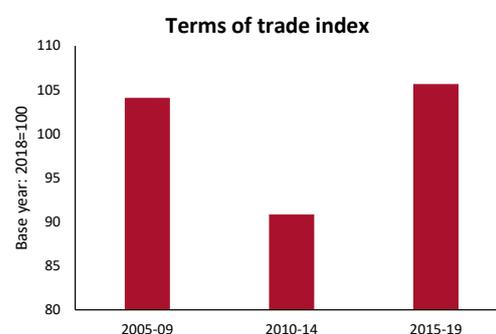
Estimated impact of explanatory variables	Effect
Real GDP growth	+
Increase in FDI inflows	+
Political stability	+
Private debt	-
Terms of trade improvement	+
Reform spurt	+

Evolution of selected variables for Mauritius

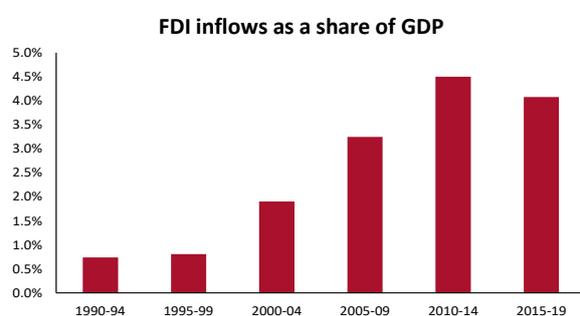
Based on the list of economic determinants that have been found empirically to influence growth in investment (as per the World Bank study above), the following graphs depict the evolution of selected macroeconomic variables for the domestic economy to assess how these factors could have impacted the investment landscape.



Rationale: Weaker real GDP growth signals reduced opportunities for firms selling their goods and services and thus leads to lower investment.

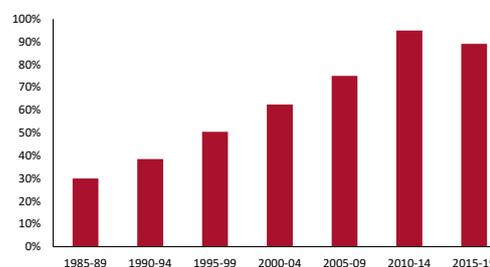


Rationale: Weaker terms of trade impact negatively growth prospects and return on investment, thereby leading to lower investment.



Rationale: FDI inflows can lift investment growth both by financing investment and by acting as catalyst for additional, domestically-financed investment. The absorption by domestic firms of the new technology, or managerial practices, introduced by FDI can also stimulate domestic investment.

Domestic credit to the private sector (% of GDP)

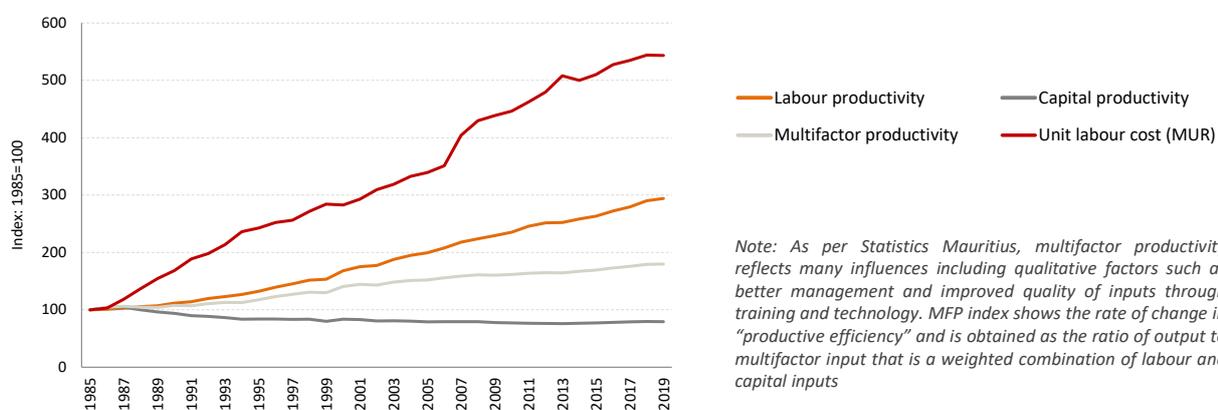


Rationale: Elevated private debt may discourage investment and may also reflect misallocation of capital to less innovative firms

Total factor productivity

Total factor productivity - also known as the Solow residual - relates to the portion of an economy's output growth that cannot be directly attributed to the accumulation of capital and labour. Its contribution to potential output growth in Mauritius has risen over time, from 18% during the period 1985-89 to over 50% in 2015-19. However, beyond the headline figure, apprehensions exist concerning the recent evolution of the drivers of productivity. Leveraging official productivity figures, we note that the multifactor productivity (MFP) for the overall economy has been around 1.1% in the decade preceding the pandemic, which is half of the rate observed during the 1990-99 and 2000-10 periods. MFP in export-oriented enterprises dropped in a similar fashion, growing at 2.6% in the 2010-19 period, compared to a growth of 5.5% registered in the 1990-99 period. In both cases, capital productivity acted as a bigger drag on growth in MFP than labour productivity. Besides, wage increases have outweighed labour productivity across the economy, resulting in an upward trend in unit labor costs, though the magnitude of the growth has softened in recent times. Regarding labour productivity, a recent study titled "Mauritius Productivity Study" by the World Bank and the National Productivity and Competitiveness Council highlighted that growth in labour productivity during the 2010-19 period has been mainly driven by within-sector change – defined as sectors becoming, on average, more productive – as compared to structural change – defined as labour moving across sectors from low to high productivity sectors. Therefore, creating new high value-added sectors to drive future productivity is essential. Interestingly, the Global Innovation Index 2022 (Box VI) stressed that Mauritius could be more innovative given the resources at hand, hinting at the potential for the country to achieve higher productivity gains. The report also underscored the country's weaknesses, notably in the fields of 'Human capital and research' and 'Business sophistication', when compared to high-income countries.

Figure 7 Evolution of key productivity indicators



Source: Statistics Mauritius

Box VI: The country's performance on the innovation front

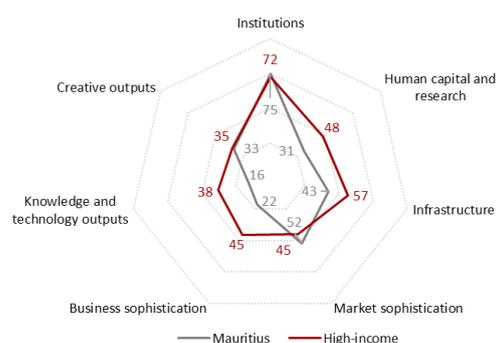
The Global Innovation Index (GII) aims to capture the multi-dimensional facets of innovation based on a variety of indicators grouped into innovation inputs and outputs. In the 2022 edition, Mauritius is ranked as the 45th most innovative economy globally, up 7 places from the previous year's ranking, and has retained its first position as a leader in innovation in Africa. Of note, while Mauritius' performance on the innovation front is on par with its economic development, the report highlights that Mauritius is less effective in translating investment in innovation into more high-quality output.

Performance of Mauritius on the Global Innovation Index 2022

Evolution of the positioning of Mauritius in GII



Benchmarking Mauritius against high-income countries



Strengths	Weaknesses
Indicator name	Indicator name
Tariff rate, applied, weighted average, all products (%)	Domestic market size, measured by GDP PPP (billions)
Government funding per secondary pupil (% of GDP per capita)	Citable documents H-index
GDP per total energy supply (per thousand 2015 PPP\$ GDP)	High-tech manufacturing, %
Political, legal, operational or security risk index	Domestic industry diversification
Number of classes in resident trademark applications issued at a given national or regional office (per billion PPP\$ GDP)	GERD (Gross domestic expenditure on R&D) financed by abroad, % GDP
Telecommunications, computer and information services imports (% of total trade)	GERD financed by business (%) and GERD performed by business, % GDP
New business density (new registrations per thousand population, 15–64 years old)	QS university ranking, top 3
Number of venture capital deals received and invested in (per billion PPP\$ GDP, three-year average)	Researchers in business enterprise (%)
Total value of venture capital received (% of GDP, three-year average)	Average expenditure of a country's top three global companies on R&D, USD million

Note:

Appropriate caution should be exercised when interpreting the performance of Mauritius in the GII given the limitations of data for some indicators. Due to adjustments made to the GII framework every year and other technical factors not directly related to actual performance (missing data, updates of data, etc.), the GII rankings are not directly comparable between one year and another

GENERAL ORIENTATIONS

The local authorities have, in the wake of the significant hit from the pandemic, initiated various macroeconomic policy actions, notably in the form of fiscal stimulus and an accommodative monetary policy stance towards supporting the economic rebound in Mauritius. That said, the pandemic has further exposed the country's longstanding structural vulnerabilities which have, over time, contributed to a deceleration in potential GDP growth as demonstrated in the preceding section of this report. In this context, the World Bank and the IMF have stressed the importance of structural reforms to reinvigorate potential GDP and shape the strength of post-COVID growth alongside helping to build resilience in the face of external shocks such as the ongoing Ukraine war. The Fund emphasised in its October 2022 issue of the World Economic Outlook that the existing policy suite being leveraged worldwide *"should be accompanied by structural reforms that improve productivity, expand economic capacity, and ease supply-side constraints."* In the same vein, in its latest Global Economic Prospects issued in January 2023, the World Bank highlighted that *"reversing the impact of these negative shocks and better preparing vulnerable groups for future crises will require structural reforms that bolster long-term growth prospects."*

With regard specifically to the Mauritian economy, notwithstanding the technical rebound from the COVID-19 blow that is being experienced since 2021, potential GDP growth could, as per our simulations that are detailed in sub-sections that follow, remain on a downward trend over the next decade in the current state of play. As such, the enunciated measures by the domestic authorities need to be complemented with a package of well-designed, carefully selected and appropriately sequenced structural policies to elevate the country's potential output to the level it would have been without COVID-19 within a decade's time. In the latter respect, this section identifies specific structural reform priorities that could be adapted in the case of Mauritius, leveraging the experience of other nations as part of, for instance, Economic Adjustment Programmes developed in selected EU economies in the wake of the financial and debt crisis, that have underpinned a boost to potential output. The proposed measures are, as demonstrated in Box VII, categorised under four key themes that had been highlighted in previous editions of MCB Focus and are in line with World Bank and IMF recommendations, aimed notably at: (i) boosting labour market participation and productivity; (ii) uplifting nationwide competitiveness through product market reforms; (iii) broadening the country's economic space; and (iv) enhancing institutional strength.

Box VII: Key pillars for transforming our economic paradigm

Laying the foundation for Mauritius to uplift its potential growth rate

To ensure optimal impact, policymakers need to:



Adopt a package of **well-designed, sequenced and carefully-executed** structural reforms



Proposed structural reform priorities



Guiding principles



Key orientations and underpinnings

- *Sustainable, prudent and credible fiscal and debt management*
- *Reliable legislative and administrative safeguards*
- *Simple, predictable and competitive tax regime*
- *Strengthening and deepening of the Mauritian IFC*
- *Openness to foreign labour and capital*
- *Conducive investment and business facilitation framework*
- *Resilient digital infrastructure*
- *Sound and stable social environment*

Sources: IMF, OECD, World Bank and various articles

SPECIFIC POLICIES

Pursue a set of labour market reforms to increase productivity and boost employment

- Ensure an optimal mix of both high- and low-skilled foreign workers whilst retaining local talents
 - Support the diligent international openness of the Mauritian economy to foreign expertise, both in the highly-skilled segment, notably in the ICT, Financial Services and high-end manufacturing sector, as well as in the low-skilled segment in sectors having a shortfall of labour such as construction, port, agriculture and tourism industries
 - Set up a dedicated talent management entity responsible for implementing strategies to attract and retain foreign talents targeted to specific industries, like the Contact Singapore alongside adopting a comprehensive skilled workers migration programme
 - Promote a holistic ecosystem to curtail the outflow of local talents

Case studies

- Malaysia: Recently, the country announced it will be temporarily easing its rules on hiring foreign workers. Through the Foreign Worker Employment Relaxation Plan, employers in critical employment sectors, with exemptions and conditional approval for Q1 2023, will be allowed to employ foreign workers from 15 source countries based on the employer's capabilities and needs without having to go through the prerequisites of employment qualifications and quota qualifications.
- Canada: The Skilled Worker category is a visa program intended for people with high levels of skills and experience, while the Canadian Business Immigration category is designed to attract skilled business people to Canada. Temporary Foreign Worker Program (TFWP) and the International Mobility Program (IMP) allow employers to hire migrant workers to fill short-term labour and skill shortages.
- Italy: The Government introduced a special tax regime (STR) to attract new tax to the country. Italy currently has a 70%-90% employment income-tax-free program, depending on the regions one reside in, to attract workers. The regime applies for five consecutive accounting periods, until revoked, or until the conditions for the relief cease to apply, and can be extended for a further five years if certain conditions are met. It can apply to remote workers of any nationality living in Italy even if foreign companies employ them.
- Ireland: The Diaspora Strategy 2020-2025 was launched with the commitments therein to be implemented by the Emigrant Support Programme. The latter includes the allocation of resources to support women's empowerment and youth engagement among the diaspora as well as the establishment of networks across the diaspora aimed at promoting ties to Ireland.

- Achieve a sustained leap in female participation
 - Endorse family-focused policies that provide support to women, notably through a comprehensive parental leave scheme, while also catering for affordable day-care and out-of-school care service
 - Foster more favourable tax and legal systems for women and promote equal pay for equal work, like in the case of Scandinavian countries whilst encouraging more flexible work environments, and boosting female representation in management

Case studies

- Australia: The country has reached a consensus on the importance of investing in childcare to enable more women to work if they so desire. To fulfil this aim, the government established a Productivity Commission investigation in 2013, with ultimately a new childcare policy was introduced in 2018.
- Nordic countries: Both parents are entitled to paid parental leave in Nordic nations. Iceland: In January 2021, the country extended the parental leave system to 12 months from 10 months. Parents can divide the leave period equally between themselves. Each parent has an entitlement of 6 months and 80% of their income if they work full-time.
- Iceland: It passed a law in 2010 requiring company boards to have a minimum of 40% of women or men. The law came into effect on September 1, 2013. In 2021, women occupied about 42% of managerial roles and 40% of parliamentary positions in Iceland.

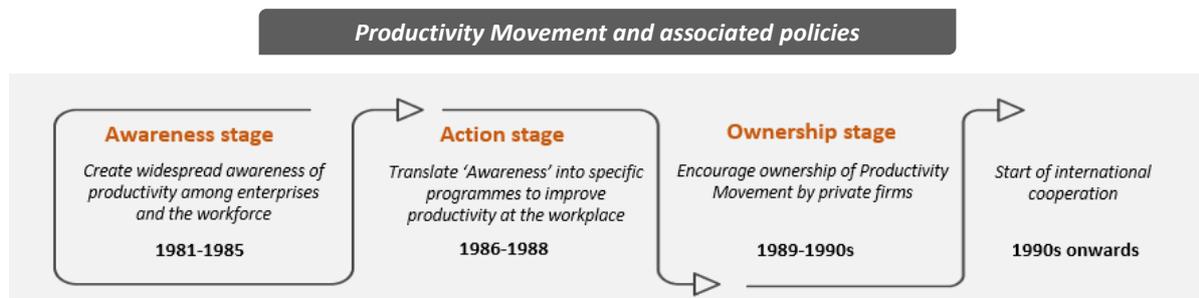
- Enhance the skill-set of the labour force alongside preparing for the future of work
 - Design moves to tackle the high underemployment levels in the country and the skills mismatch by enhancing the employability of employee base via specially designed training programmes spanning a targeted array of priority competency fields, alongside crafting and executing adequate up- and re-skilling programmes
 - Establish flexible processes and platforms to ensure that learning processes and curriculums being applied at the secondary and tertiary education levels can be rapidly refined or remodelled in tune with the evolving needs of the economy and workplace
 - Provide people in Mauritius with the opportunities to learn and develop new skills to be able to take up the jobs of the coming decade

Case study

- Ireland: The Expert Group on Future Skill Needs (EGFSN) analyses future skill needs, and develops proposals on how to meet them, through a broad membership including business representatives, educationalists, trade unionists and policy-makers. The breadth of participation enables EGFSN to identify changing occupational profiles within sectors.

Box VIII: Singapore's efforts to boost productivity in the labour market

Singapore's journey to boost productivity began in the 1960s, when unemployment rates were high. To tackle the latter and grow its economy, the authorities embarked on an industrialisation programme focused on labour-driven economic activities since the country boasted no natural resources. As such, the Government put emphasis on human resource development and took proactive steps to enhance labour productivity and global competitiveness. Against this backdrop, the seeds of productivity were sown to support Singapore's industrialisation programme for the coming decades. The national productivity drive made an important contribution to what is termed as the Singaporean miracle. In 1981, the Government launched the Productivity Movement at all levels of the economy to sharpen the country's competitive edge.



Overview of specific reforms undertaken

- Education of the public and information dissemination: publication of productivity data, delivering courses with emphasis on human relations and creating a library of local case studies on good management practices
- Strengthening company identification: payment of variable bonus, special awards for long-serving employees, house unions; promotion of labour-management joint consultation: work excellence committees and quality control circles
- In 1986, the National Productivity Board established a Management Guidance Centre to administer management consultancy programmes for local companies. These included the Industry-based Assistance Scheme designed to raise the level of productivity in key industries.
- The Skills Development Fund was established in 1978 as an employer-based funding that provides financial incentives for staff training.
- By 1989, the government launched various initiatives to self-sustain the Productivity Movement. The private sector was encouraged to lead productivity campaigns, in 1994, the Singapore Quality Award was introduced, in 1996, the Productivity Activist Scheme was launched.

- During the period 1981 to 1995, 60% of Singapore's average economic growth of 7.6% came from productivity growth, which averaged 4.5%.
- In the 1970s, Singapore's average annual TFP growth was negative, pulling down Singapore's overall productivity growth and economic growth. TFP growth improved to 1.9% during 1981-1995, contributing about 40% to productivity growth.

Sources: Government of Singapore, National University of Singapore, OECD and National Graduate Institute for Policy Studies (GRIPS)

- Design policies to tackle the challenges of an ageing population
 - Foster a thoughtful reform of the national pension framework that could, for instance, take the form of a well-crafted means testing system and indexing the amount of increase in Basic Retirement Pension allowance to inflation
 - Set-up a National Skills Strategy such as that in Portugal, with a view to developing and strengthening elder learning system, with focus, e.g. on enhancing the digital skills of elders
 - Boost opportunities to combine work and care for children and elderly parents in order to help women to (re-)enter and stay longer in the workforce

Case studies

- Portugal: A "national strategy for the promotion of active ageing" was introduced aiming to encourage older workers to remain longer in the labour force through: better access to vocational training, improvement of older workers' employment conditions, a higher penalty for early retirement, and benefits granted in case of longer contribution careers.
- Australia: Age pension has been a means tested payment, against both income (starting from AUD 2,700 per month) and asset (AUD 137,000 – AUD 237,000 per person), with eligibility for the pension based on age (67 years) and residency (at least 10 years).

- Provide targeted support to youth to boost their employability
 - Help young jobseekers navigate the labour market by providing them with adequate information, feedback, and motivation
- Improve labour market flexibility through work-style reforms
 - Encourage flexible work arrangements, where feasible, by granting employees the right to request Work-From-Home or compressed work schedules alongside providing adequate infrastructural support and relevant guidance to encourage female and elder employment

Case studies

- Japan: Japan has been undertaking work-style reforms aimed at boosting work-life balance. Such measures include, inter alia, the formulation of the Work-Life Balance Charter and Action Guidelines for Promotion of Work-Life Balance in 2007 and the enactment of the Workstyle Reform Act in 2018, which requires employers to implement specific measures to limit employees' working hours and create a healthier and more flexible work environment.
- Italy: The country recently introduced new rules to allow non-EU citizens who are "digital nomads" entry into Italy to live and work remotely. The country defines a digital nomad as "citizens of a third country, who carry out highly qualified work activities through the use of technological tools that allow them to work remotely on a self-employed basis or for a business, including those not resident in the territory of the Italian State".

Embrace product market reforms to uplift competitiveness levels

- Implement reforms in domestic oriented and tradable sectors to boost competition and enhance the quality of the business environment
 - Alongside building further capacity in agencies involved in market regulation, contract enforcement and dispute settlement for example, the range of procedures related to the investment process (e.g. fees applied, permits required, etc.) can be further streamlined by the creation of a ‘one-stop-shop’ agency or leveraging digitalisation and automation to reduce the number of procedures and regulatory bodies involved in respect of, for example, the allocation of construction permits and dealing with insolvencies
- Incorporate pro-competition principles in market regulation and policy, especially in key upstream industries such as the ICT, transport and energy sectors
- Promote the adoption of well-designed policy frameworks that can facilitate productivity diffusion by sharpening firms’ incentives for technological adoption and by promoting a market environment that reallocates resources to the most productive uses
 - Increase the speed of technology adoption alongside reducing cost of access; encourage the recourse by enterprises to research and development through tax incentives, business-university R&D collaboration and patent protection;
 - Foster the creation of research hubs in the country by providing the right institutional set-up and incentives for world leading institutions to set up facilities locally in their search for finding ways and means to increase business productivity and profitability
 - Develop a strong and modern nationwide ICT framework, characterised notably by reliable, high-speed and widely-available broadband Internet

Case studies

- China: Shanghai announced a municipal Artificial Intelligence (AI) plan in 2022 that will look into rule changes related to digital technology, promote the establishment of technical standards and regulations and form a mechanism for monitoring risks and issuing early warnings.
- Korea, Taiwan and Japan: These countries have robust public programmes and institutes that help their manufacturers—particularly small and medium-sized enterprises—adopt advanced technologies, including robotics. Some nations have proactive tax policies to provide incentives for advanced technology adoption, also including robotics.
- Estonia: Virtually all government services and a growing number of private sector services are offered online via the e-Estonia.com state portal.

Accelerate the diversification of our export markets alongside boosting local production

- Advance the diversification of our export markets, together with: (i) a realignment of the value proposition towards higher end products and niche markets; and (ii) the use of preferential market access notably in regional trading blocs and agreements to develop new exports and position Mauritius as a beachhead for services FDI into Africa
- Create additional space for the emergence of new economic sectors and development of clusters of activity, for instance, tapping into the potential from the Blue economy, pharmaceutical and Fintech
- Enhance the multiplier effect within the local economy and support the development of SMEs
 - Broaden our economic space locally by notably giving a boost to the development and expansion of SMEs and eco-entrepreneurs as well as encouraging entrepreneurship through the stimulation of tailored training programmes and provision of competitive consultancy services to aspiring, emerging and established SMEs
- Boost the adoption of renewable energy sources towards fast-tracking our transition to a green economy and assisting in reducing our import dependencies
 - Incentivise renewable or low-carbon energy generation. Specifically, feed-in-tariffs are widely used as an incentivising policy to businesses and households to invest in renewables, energy efficiency and GHG emission mitigation.

Case studies

- China: It has successfully promoted the recirculation of waste materials through setting targets and adopting policies, financial measures and legislation. The ultimate goal is a circular economy by closing industrial loops to turn outputs from one manufacturer into inputs for another. This approach reduces the consumption of virgin materials and waste generation.
 - Sweden: In 2015, the Government made the circular economy part of its annual address to parliament. The country is pioneering ways to use natural materials that are 100% recyclable and can be part of the 'cradle-to-grave' process.
- Broaden domestic production of goods and services to promote the export of more 'complex' items
 - As per the IMF report 'Unlocking Structural Transformation In Mauritius: challenges and opportunities', Mauritius' complexity of exports, both goods and services, is significantly below that of global competitors. As per latest data, Mauritius is ranked as the 66th most complex country in the Economic Complexity Index (ECI) ranking. The country could gain by further improving the sophistication of its export basket while moving up the value chain, backed by a stepping up of R&D initiatives, total factor productivity and trade openness.

Uphold our institutional strength

- Enhance the quality of the business environment by better yielding the concept of economic governance in order to uphold good governance, the rule of law and the protection of property rights

Case study

- Nordic nations: Denmark, Norway, Sweden, and Finland joined the Open Government Partnership (OGP) with a high baseline of openness and transparency. The combination of citizen empowerment and government policies to keep the system open and transparent is a critical factor for success in controlling corruption in Finland. A comprehensive system of e-governance and effective channels of communication provide citizens with direct access to law and policy makers, fostering a culture of social trust, transparency and civic activism

- Restore a simple, predictable and competitive tax regime
 - Mauritius has departed from the low, simple, harmonised and predictable fiscal regime that, over the years, enabled it to improve its business climate and boost foreign investment. This warrants attention in view of the risk of a rechanneling of capital and financial flows to other competitor jurisdictions that are gearing up on their value proposition and the potential impact on the country's ability to retain local human expertise and attract foreign talents in specific fields.

Case study

- Estonia: For the ninth year in a row, the country has the best tax code in the OECD, according to the Tax Competitiveness Index 2022. Estonia has no corporate income tax on reinvested and retained profits (and a 14-20% corporate income tax rate on distributed profits). This means that its corporate income tax system allows companies to reinvest their profits tax-free. It has a flat rate of taxation on individual income. Tax is not applied in the case of distributed dividends that have already been taxed with a corporate income tax. Its property tax applies only to the value of land, rather than to the value of property or capital. It has a territorial tax system that exempts 100% of foreign profits earned by domestic corporations from domestic taxation, with few restrictions.

- Expand the scope and depth of infrastructure-upgrading endeavours; promote the comprehensive and speedy implementation of capital projects; enhance the efficiency of infrastructure investment
 - Further upgrade the quality of seaport facilities by broadening our maritime links with trading partners and nations with which Mauritius nurtures business interests, providing

integrated and more extensive port facilities in relation to ship repair and maintenance, storage facilities, transit solutions, customs clearance, quarantine and various types of automated processes and forging alliances with international shipping lines and national cargo handling corporations

- Undertake study of the business requirements of the national carrier and hotel operators so as to ensure that there is a more pragmatic air access strategy
- To cope with expected future megatrends as well as with climate change amongst others by designing and executing an updated and full-fledged National Physical Development Plan for spearheading the spatial deployment of projects and reforms, with an underlying focus on an ambitious, transparent and well spelt-out 'Plan d'Aménagement du Territoire'
- Building a close-knit partnership strategy between the public and private sector to provide a solution-driven approach and enable knowledge and resource transfers by diverse stakeholders

Case study

- United Kingdom: In late 2016, the United Kingdom extended the UK Guarantees Scheme (UKGS) – a guarantee scheme to support private investment in infrastructure projects – to at least 2026. All Public Private Partnerships (PPP) projects are now recorded in the Whole of Government Accounts, a consolidated set of financial statements for the UK public sector.

- Strengthening the reputation of Mauritius as a credible international financial centre of substance
 - Actively deploy our Africa Strategy, by garnering appropriate market knowledge, further forging Government-to-Government partnerships, and boosting our exports of goods and services to economies offering good long-term economic and market prospects
 - Enhance the adaptability and competitiveness of our value proposition on international markets, notably by supporting the development of financial and capital markets and encouraging the growth of secondary markets towards improving resource allocation as well as designing innovative tools
 - Expand our network of International Investment Agreements within Africa while also widening our network of commercial attaches in African countries to allow for greater economic diplomacy
 - Scale up capacity in terms of know-how and expertise, alongside furthering our openness to foreign expertise and attracting top-calibre foreign professionals catering for more value-added and complex offerings

FORECASTING THE EVOLUTION OF POTENTIAL OUTPUT

With reference to Figure 8 below, it can be observed that potential output growth in Mauritius has, as mentioned previously, followed a downtrend during the past decades, as gauged by the flattening of the curve of potential GDP. The drop was exacerbated by the impact of the pandemic but a rebound is set to be seen with the pickup in economic activities. Leveraging the principles of the Cobb-Douglas production function described in the previous section, we attempt to forecast the path of potential output in Mauritius over the coming decade under specific assumptions formulated regarding the evolution of labour, the capital stock and total factor productivity which are its key determinants empirically.

Scenario based on current state

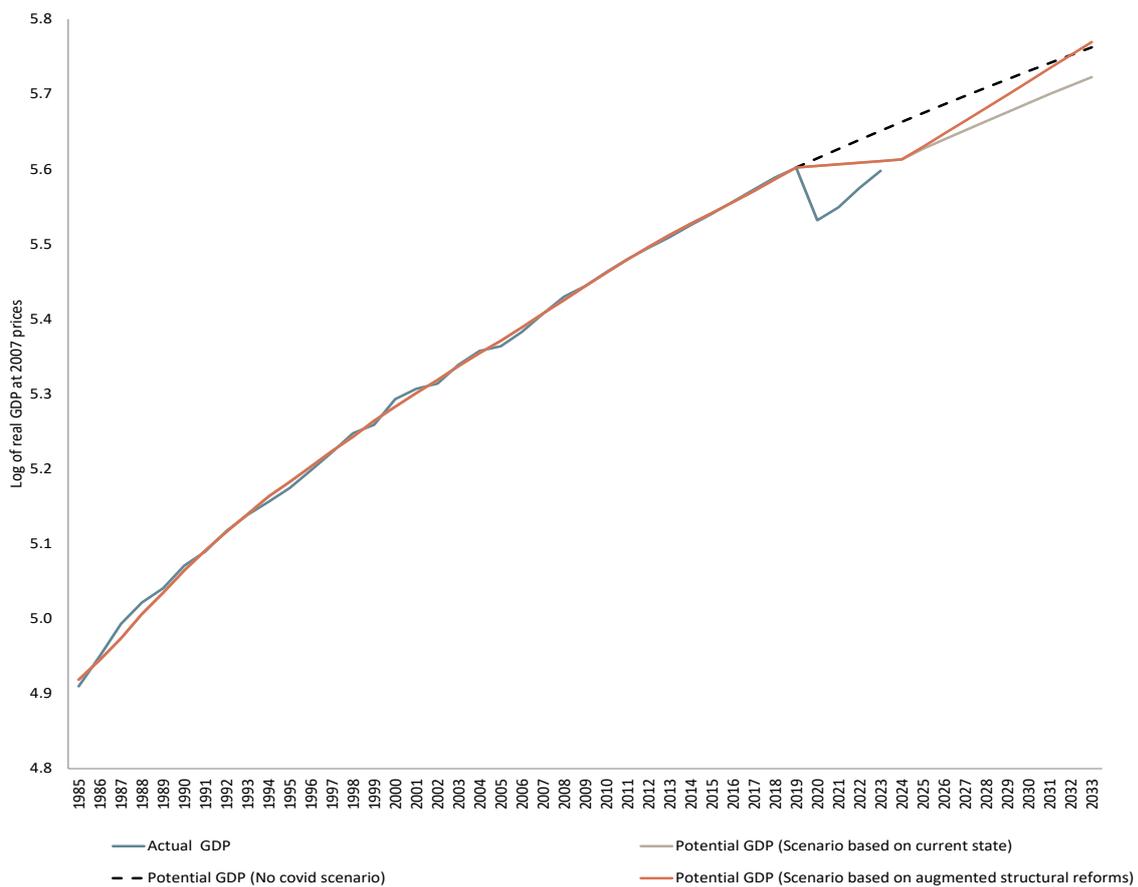
In the current state scenario, after dropping from 79.8% in 2001 to 73.1% in 2019, we assume that male labour force participation rate would remain slightly below 70% over the next 10 years, in line with demographic trends projected by Statistics Mauritius impacting working age population. As regards female activity rate, it is assumed to pick up gradually to stand at around 47% by end of the 10-year forecast period, on the back of ongoing incentives put in place by the authorities to encourage women's employment. On the other hand, whilst total factor productivity is assumed to maintain a steady growth pace over the 10-year horizon, foreign employment and capital investment are assumed to uphold their declining growth trends. Overall, under the assumptions made in this scenario, the permanent loss in potential output induced by the pandemic is expected to set Mauritius on a lower development path, with convergence to the pre-COVID level unlikely to be achieved in the coming decade as illustrated in Figure 8.

Scenario based on augmented structural reforms

This scenario makes allowance for the impact of a set of structural reforms to complement the existing measures being implemented by the authorities. It is built along the premise of determining the necessary boost needed from the structural reforms evoked in the previous sub-section in labour, capital and TFP to rekindle the level of potential output in Mauritius to its pre-COVID trend path in a decade's time. Of note, structural reforms, as gauged by the literature, take time to yield an impact on output. To begin with, it is estimated that a key push is needed in female participation rate to gradually reach around 55% in a decade's time, which is close to the level in high income economies. Another important driver to realise the afore-stated objective is a doubling of the number of foreign workers over the coming 10 years to assist in: (i) offsetting the drag from the gradual ageing of the country's population and the resulting implications on

labour force; (ii) transferring expertise and generating knowledge spillovers in high-skilled sectors; and (iii) meeting the deficiency of labour in low-skilled occupations. This would, in turn, contribute to a scaling up in growth in total factor productivity in the reform scenario, relative to the scenario based on current state. A broadly similar uptick is also required in capital investment to support the pickup in potential output. Overall, the empirical assessment posits that potential growth rate should exceed the 4% mark in a decade's time with the country returning to the potential output level it would have been had there not been the COVID-19 shock. The boost from the augmented structural reforms outlined in the report can be observed below.

Figure 8 Projections of potential output under alternative scenarii



Source: MCB staff estimates

Notwithstanding the technical rebound observed in the wake of the COVID-19 shock, the potential growth rate in Mauritius looks set to remain on a downtrend over the coming decade in the current state of affairs. This reflects the drag from the country's inherent structural imbalances which are compounded by the permanent loss triggered by the pandemic. Against this backdrop, and as empirically evidenced in this document, Mauritius stands to gain from the adoption of a set of tailored structural reforms to complement the measures already initiated by the authorities over the years.

The report advocates for reforms of the labour market with focus on boosting women participation by establishing a conducive and supportive environment along with moves to enhance our openness to foreign labour, both in the high- and low-skilled segments to arrest the projected decline in working age population. In the area of product markets, it is deemed crucial to uplift the country's competitiveness levels by further improving the ease and cost of doing business and enhancing the recourse to research and development and technology adoption which can give a boost to total factor productivity. The report also stresses the importance of fostering a local production and consumption mindset in Mauritius whilst shifting our exports of both goods and services into a higher gear, underpinned by sustained market diversification. Along the way, it is critical that the country's tax regime is made conducive enough to uphold the competitive edge of businesses on the regional and international fronts, and guard against distortions thereto, as this situation could potentially lead to mixed signals and render the fiscal regime less efficient from a Pareto perspective.

The success of Mauritius in uplifting quality of life over time has been underpinned by the collective efforts of our citizens and close public private sector collaboration. This is equally important today to recoup the losses from the pandemic and adapt to the changing global architecture with a view to building back our economy better and stronger. The process is likely to be challenging but the ultimate prize will be an improved long-term growth potential that fosters economic welfare. That, by any measure, is a prize worth having and one that is well within the grasp of Mauritius Inc.

J. Gilbert Gnany

Chief Strategy Officer

March 1, 2023

Sources

Bank of Japan, Productivity Trends in Japan — *Reviewing Recent Facts and the Prospects for the Post-COVID-19 Era*, July 2022

Berlemann and Wesselhöft, *Estimating Aggregate Capital Stocks Using the Perpetual Inventory Method – A Survey of Previous Implementations and New Empirical Evidence for 103 Countries –2014*

Centre for Social and Economic Progress

Chinadaily, China, 2023

Doha Forum on Decent Work and Poverty Reduction, *Skills development for job creation, economic growth and poverty reduction, 2011*

Economic Complexity Index

ECB Economic Bulletin, Issue 4/2019, *The euro area labour market through the lens of the Beveridge curve*

ECB Economic Bulletin, Issue 7/2020, *The impact of COVID-19 on potential output in the euro area*

ECB Economic Bulletin, Issue 7/2021, *Scarring effects of the COVID-19 pandemic on the global economy – reviewing recent evidence*

European Central Bank

European Commission, *The 2018 Ageing Report - Underlying Assumptions & Projection Methodologies, 2018*

Federal Reserve Bank of St. Louis

Global Innovation Index 2022, World Intellectual Property Organisation

Harvard Business Review, *Preventing and Reversing Brain Drain, 2016*

Ireland Department of Foreign Affairs

IMF Staff Discussion Note, *Economic Gains from Gender Inclusion: New Mechanisms, New Evidence*, J. D. Ostry, J. Alvarez, R. Espinoza, and C. Papageorgiou, October 2018

IMF, *Staff report for the Article IV consultation, Mauritius*, April 2019

IMF, *Structural Reforms and Macroeconomic Performance: Country Cases, 2015*

IMF, *Unlocking Structural Transformation in Mauritius: Challenges and Opportunities, April 2019*

IMF, various publications

IMF World Economic Outlook database

IMF, World Economic Outlook, various editions

IMF Working paper, *Mauritius: The Drivers of Growth—Can the Past be Extended?*, July 2014

Investing.com

Japan International Cooperation Agency (JICA) and GRIPS Development Forum, *Kaizen National Movement — A Study of Quality and Productivity Improvement in Asia and Africa, 2011*

Malin Andersson, Bela Szörfi, Máté Tóth and Nico Zorell, *Potential output in the post-crisis period, Published as part of the ECB Economic Bulletin, Issue 7/2018*

MCB Focus, *Previous issues*

MCB Strategy, Research & Development, Staff Estimates

National Graduate Institute for Policy Studies

National University of Singapore, *Singapore's Productivity Challenge: A Historical Perspective, 2016*

Nordic Council of Ministers, *The Nordic Gender Effect at Work, 2018*

OECD, various publications

OECD (2019), *"OECD Technical Report on Progress on Structural Reform under the G20 Enhanced Structural Reform Agenda"*, OECD Publishing, Paris, [oe.cd/g20-esra-2019](https://www.oecd.org/g20-esra-2019).

Office for Budget Responsibility, *Briefing Paper No. 8, Forecasting Potential Output, The Supply Side of Economy, November 2022*

Reserve Bank of Australia, *Potential Growth in Advanced Economies, December 2019*

Statistics Mauritius

Selected Internet and Newspaper articles

Tax Competitiveness Index 2022

The Borgen Project, *Facts about Women's Rights in Iceland, 2022*

The Japan Institute for Labour Policy and Training, *Labour Situation in Japan and Its Analysis, 2013*

World Bank, *Global Economic Prospects, various editions*

World Bank, *Mauritius - Through the Eye of a Perfect Storm: Coming Back Stronger from the COVID Crisis, A World Bank Group Country Economic Memorandum (English), May 2021*

World Bank, *Mauritius - Productivity Study: MU (P173238) Productivity Study Report - Final Draft 7-01-2021 (English), August 2021*

World Development Indicators. Washington, D.C. :The World Bank.

World Economic Forum, *various articles*

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