



Country Risk Analysis

Report

Singapore

Prepared by A. Vadodaria, A. Nezhdanova

2023

I. General Information

Singapore is a city-state in Southeast Asia with a population of less than 5 million people and the second-highest GDP per capita in the world. With a multicultural population and in recognition of the cultural identities of the major ethnic groups within the nation, Singapore has four official languages: English, Malay, Mandarin, and Tamil. English is the lingua franca, with its exclusive use in numerous public services. Multi-racialism is enshrined in the constitution and shapes national policies in education, housing, and politics.

Singapore is located at the southern tip of the Malay Peninsula. It consists of the diamond-shaped Singapore Island and 60 small islets. The main island occupies about 46.5 km² and is separated from Peninsular Malaysia to the north by a narrow channel crossed by a road and rail causeway that is more than a kilometer long. The southern limits of the state run through Singapore Strait, where outliers of the Riau-Lingga Archipelago (which is a part of Indonesia) extend to within 26 km of the main island (Kennard et al., 2023).



Fig. 1. Singapore on the map

Source: Encyclopedia Britannica (2023)

Singapore is the largest port in Southeast Asia and one of the busiest in the world. It owes its growth and prosperity to its position at the southern extremity of the Malay Peninsula, where it dominates the Strait of Malacca, which connects the Indian Ocean to the South China Sea. Singapore used to be a British colony and today it is a member of the Commonwealth. Singapore first joined the Federation of Malaysia on its formation in 1963 but seceded to become an

independent state on August 9, 1965. The combined area of these has increased by approximately 25% since the country's independence as a result of extensive land reclamation projects.

As for the geographical characteristics, the island of Singapore has a very flat relief. Nearly two-thirds of it are less than 15 m above sea level. The highest summit has an elevation of only 162 m.

Because Singapore is in the equatorial monsoon region of Southeast Asia, its climate is characterized by uniformly high temperatures and nearly constant rains throughout the year. The temperature is high all-year-round and frequent monsoons do not allow them to get to extreme numbers (the highest temperature ever recorded was only 36° C). Intermonsoonal periods, however, are characterized by intense rains and thunderstorms. Altogether, rain falls somewhere on the island every day of the year.

Singapore's history dates back at least eight hundred years. In the beginning of the 19th century, it used to be an entrepôt trading post of the British Empire. After that Singapore was occupied by Japan for 3 years. Singapore became an independent sovereign country in 1965 (Kennard et al., 2023).

After early years of turbulence and despite lacking natural resources, the country rapidly developed since 1960 and became one of the Four Asian Tigers. Early economics development was closely supervised by the government, however, in the last few decades, the idea of extensive government intervention in economic development has weakened. Today official policy relies on market forces, privatization of government enterprise and more support for domestic private businesses.

Singapore nowadays is highly integrated into the global economic system with hardly any trade barriers and a constant inflow of capital, which constitutes the base of its economic growth. Its growth was based on international trade and economic globalization. It is the second most developed nation in the world in terms of GDP per capita and the only country in Asia to receive a AAA sovereign credit rating from every major rating agency.

Singapore is a unitary parliamentary republic with a Westminster system of unicameral parliamentary government, and its legal system is based on common law. Singapore is one of the five founding members of ASEAN.

Religious affiliations reflect ethnic patterns. The biggest religion, practiced by a third of population, is Buddhism. Malays, and some Indians, adhere to Islam, which is the second most-popular religion. The Christian community has grown rapidly to become comparable in size to the Muslim population; nearly all Christians are Chinese.

II. Geographical characteristics and natural resources, human resources

Singapore has based its growth strategy on smart policies and sustainable use of limited resources. In this part we are going to review the resources that Singapore possesses and their quality.

1. Human Capital

Heavily urbanized, Singapore has a high population density (second highest in the world), but it also has been a regional leader in population control. Its birth and population growth rates are the lowest in Southeast Asia. Singapore's high average life expectancy and its low infant-mortality rate reflect high standards of hygiene and access to an excellent health care system. The low birth rate and greater longevity of the population have raised the median age, a trend which is also observed in other developed nations.

Singapore enjoys an extremely good quality of human resources. According to the latest available World Bank report on human capital, Singapore's Human Capital Index as of 2020 is 0.88. This is higher than the average for the East Asia & Pacific region (0.59) and High-Income countries (0.71) (The World Bank, 2021).

Singapore's total population stood at 5.92 million as of 2023. The average total population growth rate over the past five years was comparable to the preceding five-year period. Пока у них небольшой прирост населения, но где-то с 2024 может начаться отрицательный рост (UN, 2022). The resident Total Fertility Rate (TFR), which has generally been declining over the past few decades, reached a historic low of 1.04 in 2022. However, this result might have also been affected by the cultural factor: 2022 was the year of the Tiger in the Lunar calendar, which is usually associated with low birth rates among Chinese people (National Population and Talent Division, 2022).

The proportion of citizens aged 65 years and above is rising, and at a faster pace compared to the last decade. Large cohorts of "baby boomers" have begun entering the post-65 age range. Currently, 61% of citizens are aged 20-64 years. This proportion has decreased from 64.9% in

2013. On the contrary, the proportion of citizens aged 65 and above has increased from 11.7% in 2013 to 19.1% in 2023. By 2030, around 1 in 4 citizens (24.1%) will be aged 65 and above (Figure 2).

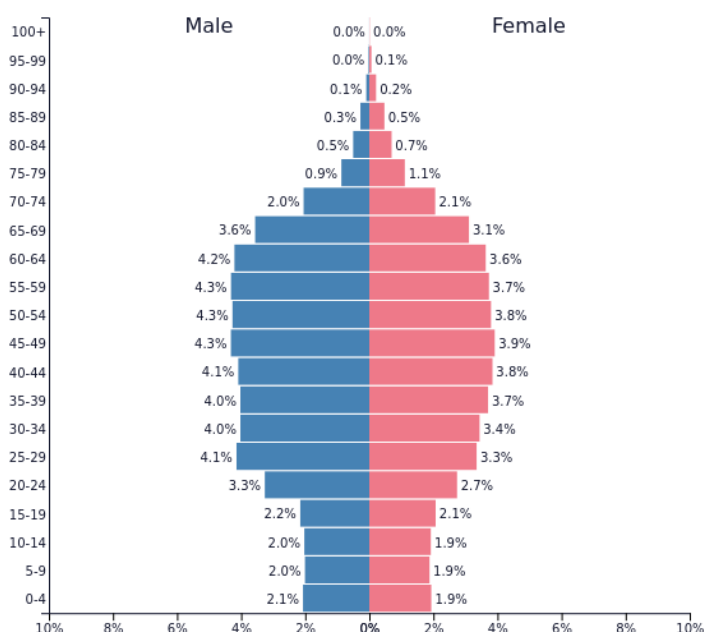


Fig. 2. Singapore population pyramid (2022)

Source: United Nations, 2022

Singapore's population also boasts high levels of education. The government spends around 20% of its annual expenditure on education. Most locals speak English, which is also relevant for business. There is a government-sponsored training program to improve expertise and to constantly upgrade workers' skills. As shown in Figure 3, the majority of Singaporeans have a university degree or a professional qualification.

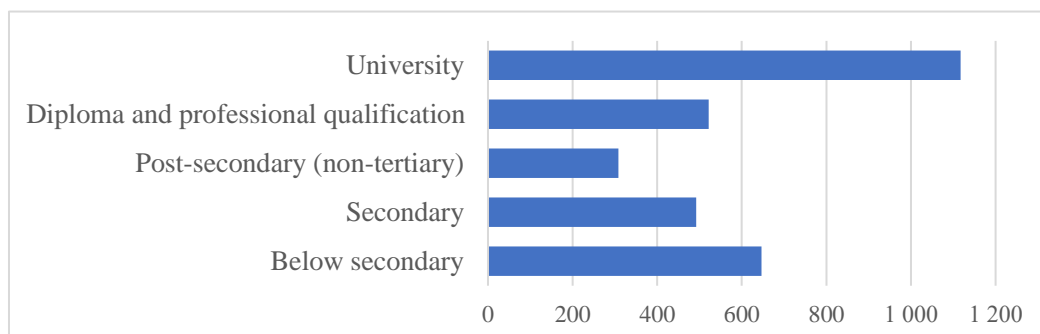


Fig. 3. Breakdown of residents aged 25 years and older by highest education qualification attained, 2022 (in thousands)

Source: Singapore Department of Statistics, 2022

The labor productivity rate also demonstrates the outstanding quality of Singaporean human capital. According to the International Labor Organization, Singapore had the fourth-highest GDP per hour worked in the world in 2021, following Luxembourg, Ireland and the U. S. Virgin Islands (ILO, 2022).

One of the limitations of Singaporean labor force is that domestic labor supply cannot satisfy demand in some sectors. As a result, a bit less than a third of Singaporean population consists of non-residents (1.77 million people out of the 5.92 million population). The increase in the non-resident population from 2021 to 2023 can mainly be attributed to foreign employees returning to Singapore after the ease of travel restrictions connected to Covid-19 (Figure 4).

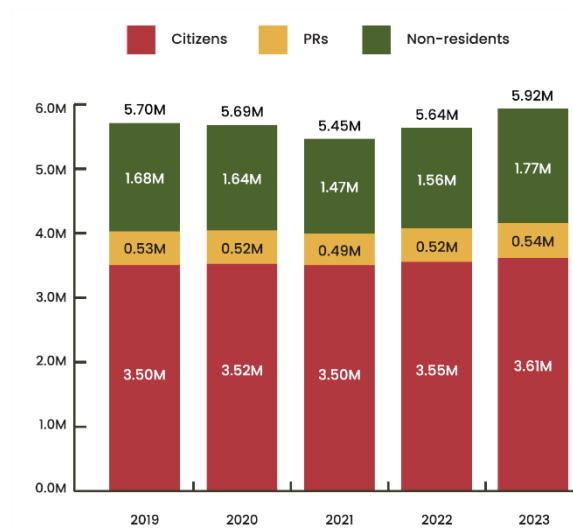


Fig. 4. Total Population by residency status (2023)

Source: Singapore Department of Statistics, 2023

2. Natural Resources

As Singapore is a city-state with not much land area, it is not particularly rich in natural resources, so it has to rely on imports for a lot of materials and consumer goods.

Singapore is forced to import most of the food consumed in the country. The biggest challenge facing its agricultural industry is the limited size of agricultural land. In 2015, arable land made up 0.8% of Singapore's land area according to data from the World Bank, which indicates a significant decline from 6% in 1996. The decline can be explained by the decrease in the importance of the agricultural sector to Singapore's economy.

Singapore also has very limited non-renewable natural resources. Its economy is dependent on oil and natural gas imports. Singapore took a conscious decision to move from fuel oil to natural gas in 2001. Still, natural gas currently accounts for less than 30% of electricity generation (Figure 5). Singaporean government has also introduced programs meant to develop alternative energy sources such as solar energy, seeing as Singapore is situated in the equatorial belt and has great potential in it, but the development of solar energy faces the same problem – lack of availability land, so its percentage in the country’s energy balance remains low (IEA, 2022).

Nevertheless, Singapore is playing a growing role in global energy markets as a major energy-trading hub and the world’s third largest oil refining centre. It is a key financial services centre in Asia and is likely to play an important role in financing energy sector development in Southeast Asia in the future.

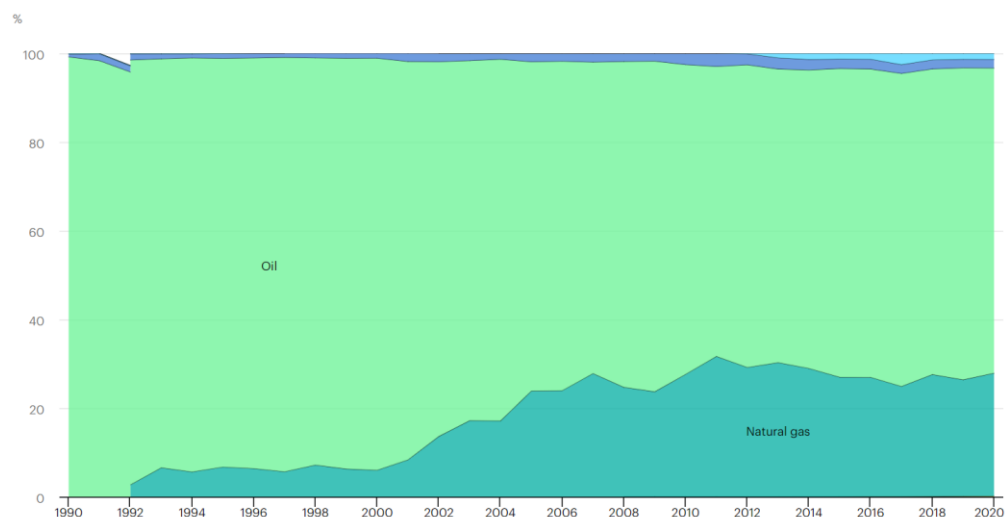


Fig. 5. Total energy supply (TES) by source in %, 1990-2020

Source: IEA, 2023

3. Transport Infrastructure

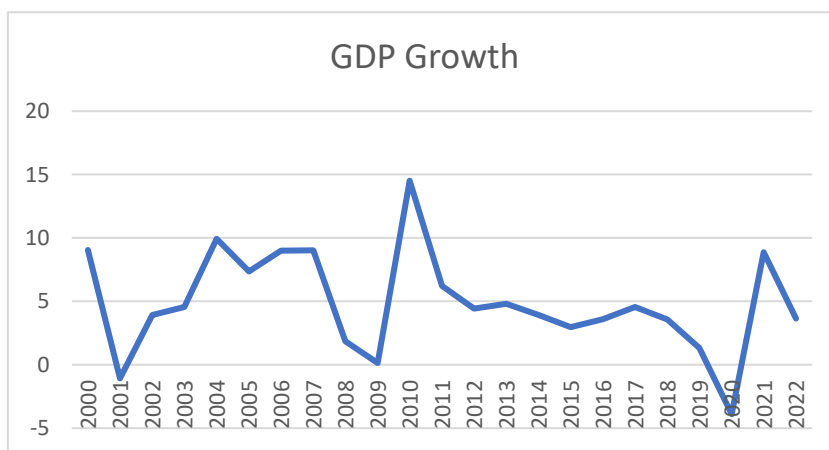
Singapore is an extremely small country, which, in this case, presents an advantage as it is very-well intraconnected by transport, which is a great benefit to its economy and population. Singapore does not have a broad road network, but it is also important to note that the country's population density is extremely high at around 7840 inhabitants per km². With so many people in such a relatively small area, longer driving distances are rare (SG101, 2023). The rail system is

the backbone of Singapore's public transport system. It enabled the government to decentralize urban centers. Singapore also has 2 international airports that are used to carry civil passengers as well as move cargo.

To sum up, Singapore's basic characteristics allow the country to follow a sustainable growth strategy by effectively utilizing the limited resources. Constant restructuring of the economy helps Singapore to adapt to evolving global and domestic circumstances and to maintain its economic growth.

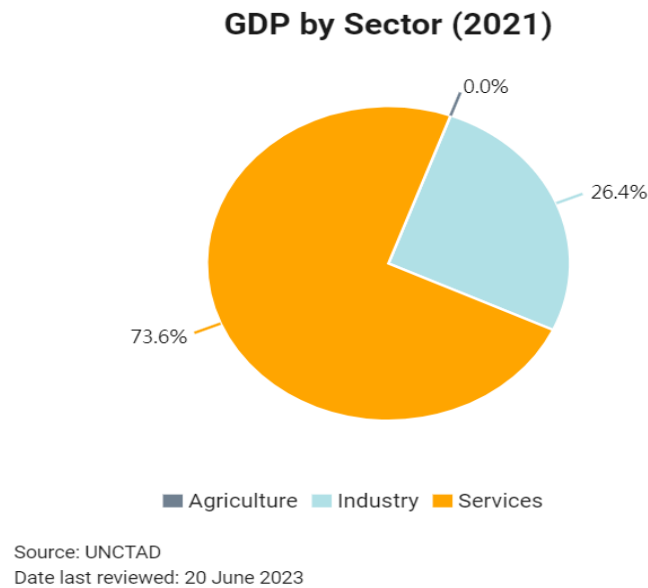
III. Macroeconomic analysis

Singapore's economic growth momentum in 2023 year-to-date has slowed significantly compared with annual GDP growth of 3.6% in 2022. A key factor driving the weakness of economic growth has been contracting manufacturing output and exports. But, according to a recent announcement (November 22, 2023) from the Ministry of Trade and Industry (MTI), Singapore's GDP growth is anticipated to reach approximately 1.0 to 3.0 percent in 2024. This positive numbers could be explained a resurgence in tourism, digital transformation, and service sector activity as shown in the graph below about sectoral changes in GDP.



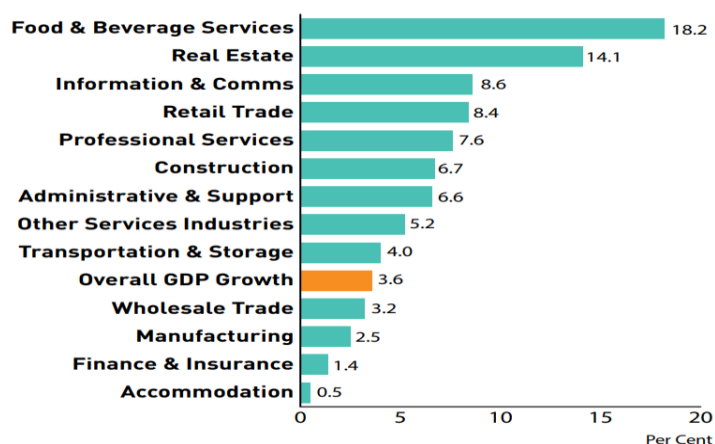
The graph above shows the trends in GDP growth for 22 years. The Singapore economy fell tremendously in 2001, after achieving 10% growth in 2000. This sharp reversal in growth was primarily due to the slump in external demand although weak household consumption and business investments also contributed to the contraction. Singapore's economy also reacted to the Subprime crisis and Covid 19.

GDP by Sector



As per the pie chart above, Most of the GDP is an output of the service sector. There's 0% GDP from the agriculture and that might mean that the economy depends on imports of the same. Singapore has only around 720 square kilometres of land, of which only 1% has been allocated to food production. Due to scarce agricultural land and resources, Singapore imports 90% of its food. However, the service sector seems to be thriving even though manufacturing had seen a dip due to reduced demand from slowing economies in 2022.

Exhibit 1.2: GDP and Sectoral Growth Rates in 2022



There was an increase in GDP growth the following year in 2022. By sectors, the manufacturing sector grew by 2.5 per cent in 2022, a marked slowdown from the 13.3 per cent

growth achieved in the preceding year. Services producing industries posted growth of 4.8 per cent in 2022, easing from the 7.6 per cent expansion in 2021. All services sectors registered full-year expansions, with the food & beverage services (18.2 per cent) and real estate (14.1 per cent) sectors recording the fastest growth in 2022. Meanwhile, the construction sector grew by 6.7 per cent in 2022. So, clearly there were weaknesses in the manufacturing sector while the service sector seemed to have outperformed. Supposedly, the downturn in manufacturing and trade-related sectors could end, if the predicted GDP growth takes place.

Income

Among resident employed households in Singapore, the median monthly household income from work rose by 6.1% in nominal terms, from \$9,520 in 2021 to \$10,099 in 2022. After taking inflation into account, Singapore's median monthly household income from work increased by 0.2% in real terms in 2022. In contrast, the median monthly household income in Singapore a decade ago (2012) saw a figure of \$7,566, which has since increased by 33.5%.

Income distribution

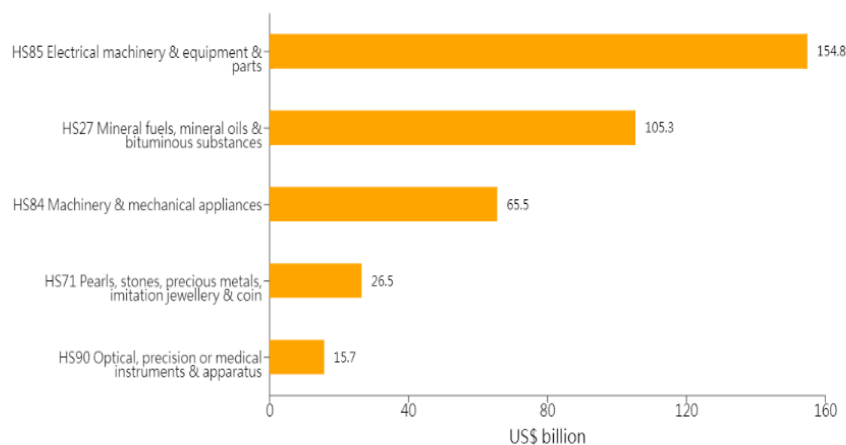
The bottom 10% of households earned \$2,314 monthly, while the top 10% earned \$31,430 monthly. The Government of Singapore monitors and tracks income inequality closely. Over the past decade, income inequality in Singapore as measured by the Gini coefficient has been steadily declining. The Gini coefficient declined from 0.478 in 2012 to 0.437 in 2022. If we include the effects of redistribution through taxes and transfers, Gini coefficient in 2022 would further decline to 0.378, down from 0.432 in 2012. However, their Gini Coefficient is relatively high (45.9) compared to other countries, it falls close to countries with really high inequalities like Zimbabwe, Mozambique, etc. Which is surprising for a country like Singapore.

Source: Quarterly Informal Economy Survey (QIES) by [World Economics](#), London

Informal Economy Size (Underground Economy)

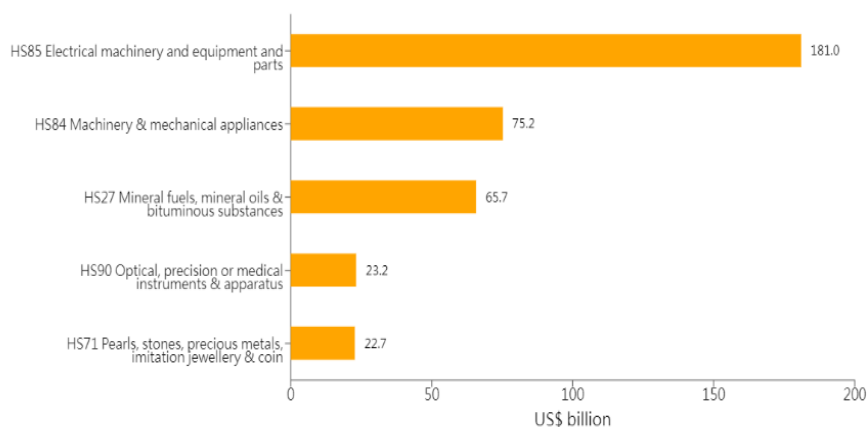
An informal economy (informal sector or shadow economy) is the part of any economy that is neither taxed nor monitored by any form of government. The size of Singapore's informal economy is estimated to be 10.4% which represents approximately \$69 billion at GDP PPP levels. This is usually a bad indicator, and says that a lot of income is generated possibly from unlawful activities.

Major Import Commodities (2022)



Source: ITC-Trade Map
Date last reviewed: 20 June 2023

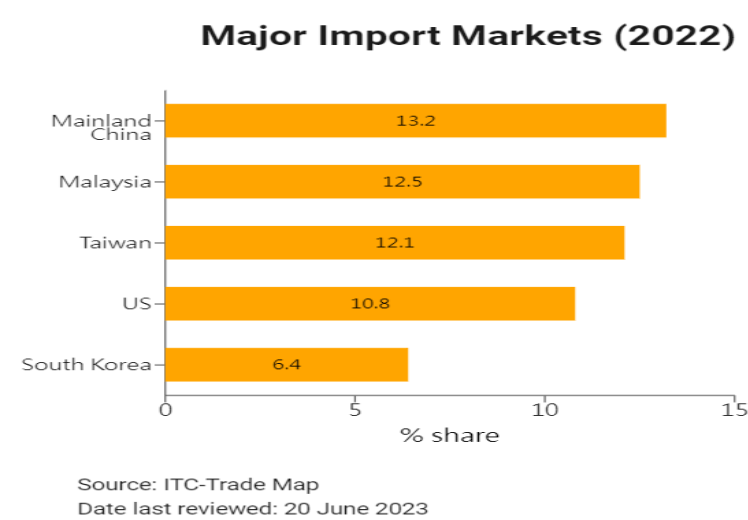
Major Export Commodities (2022)



Source: ITC-Trade Map
Date last reviewed: 20 June 2023

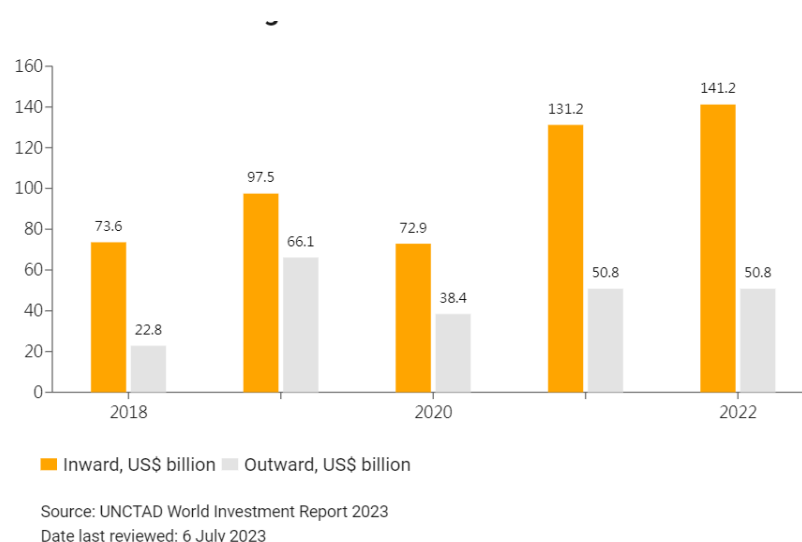
HS85 exports from Singapore totalled \$ 180 billion in 2022. Sales of commodity group 85 from Singapore went up by 8.45% compared to 2021. The main destinations of each being the countries shown in the graphs below with China being the leading partner for both import and export. The value imports of commodity group 85 to

Singapore totalled \$ 154 billion in 2022, went up by 12.3% compared to 2021. It was the 7th largest importer of Electrical machinery and electronics in the world. Singapore is also highly dependent on importing. It's quantity has increased significantly from 2021 when it was the 9th largest importer of the same. Singapore also exports the same products to mainly Malaysia. Singapore exports exceed its imports for almost all commodity sectors, except HS27 (minerals) and HS71 (pearls and Jewellery). Further, Singapore continues to perform its traditional function as a **financial intermediary**, shipping raw materials such as rubber, timber, and spices from the Southeast Asian region in exchange for finished goods from both within and, especially, outside the region.



Major imports are machinery and transport equipment and crude petroleum, while machinery and refined petroleum products are the major exports. China, the US, Indonesia, Malaysia Hong Kong and Japan are Singapore's principal trading partners. The three major services categories account for 56.5% of Singapore's services exports and 50.4% of services imports: Transport, Financial Services and Telecommunications, Computers & Information. Transport is a significant part of Singapore's services trade, accounting for about 35% in both exports and imports (Singapore Department of Statistics, 2022).

FDI Flow



FDI flows in Singapore have expanded 2 folds in the past 5 years, outward flow has decrease compared to 2019. Singapore's investment promotion strategy has been framed to pull in major investment towards high value-added manufacturing and service activities. Singapore offers several incentives to investors across a range of industries. All businesses (local and foreign) must be registered with the *Accounting and Corporate Regulatory Authority*.

There are various tax incentives available in specified activities or industries identified as being beneficial to Singapore's economic development, which covers manufacturing, services, trade and finance.

Under Singapore's liberal foreign investment legislation, there are technically no restrictions on the type of activity that may be carried out. However, investment in selected sectors, including financial and telecommunications services as well as manufacturing of strategic goods require licences from the appropriate governmental authorities. Certain industries are effectively unavailable to foreign investors. These industries are air transport, public utilities, newspaper publishing and shipping.

Source: United States Department of Commerce, Inland Revenue Authority of Singapore, Fitch Solutions

Strengths

- High non-price competitiveness
- High value-added industry (new technologies, finance, chemicals, pharmaceuticals)
- Major goods transport and trading hub (air and sea), financial centre
- Large FDI inflows thanks to the generous tax regime, political stability, and excellent business climate
- Major Asian exporter of capital, mostly through its sovereign wealth funds

Weaknesses

- Dependent on exports and imports (energy and food)
- Shortage of skilled labor and housing
- Aging population, relatively high elderly dependency rate (27%)
- Vulnerable to the structural slowdown of the Chinese economy and geopolitical tensions between the United States and China

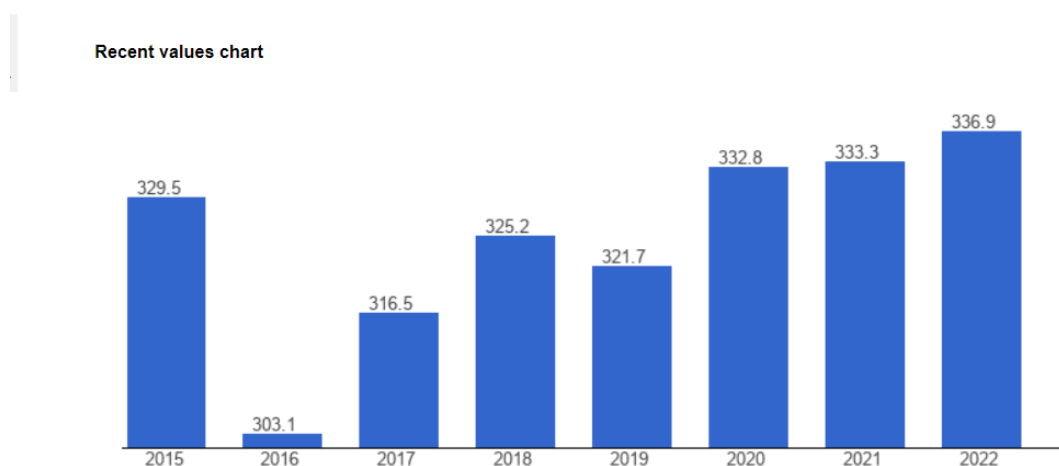
Source: Coface

Trade Openness Chart

Singapore has been a member of the *World Trade Organization* since 1 January 1995. Singapore is generally a free port and open economy, and the average tariff is 0%. Around 99% of all Singapore imports enter duty free. The country's two-way trade (goods and services) represents more than 300% of GDP. The main objectives of Singapore's trade policy are to expand overseas opportunities for locally based companies, with supporting a clear and fair-trading environment, and minimise impediments to the flow of imports and exports, by enhancing Singapore's trade and business environment.

For social and environmental reasons, Singapore levies high excise taxes on beer, wine and liquor, tobacco products, motor vehicles, and petroleum products. Singapore also restricts the import and sale of non-medicinal chewing gum.

Source: WTO—Trade Policy Review, Inland Revenue Authority of Singapore, US International Trade Administration, Fitch Solutions



From, the graph above, we can say that the range of trade openness in Singapore has been from 300-340. Apparently, trading is not much a problem, they have a competitive regime and absence of quantitative restrictions and low tariff levels (5 percent or less). However, Singapore has felt the impact of the global recession primarily through the trade channel. Non-oil domestic exports fell by close to 30%. Although, they had a strong revival. Singapore has the highest trade to GDP

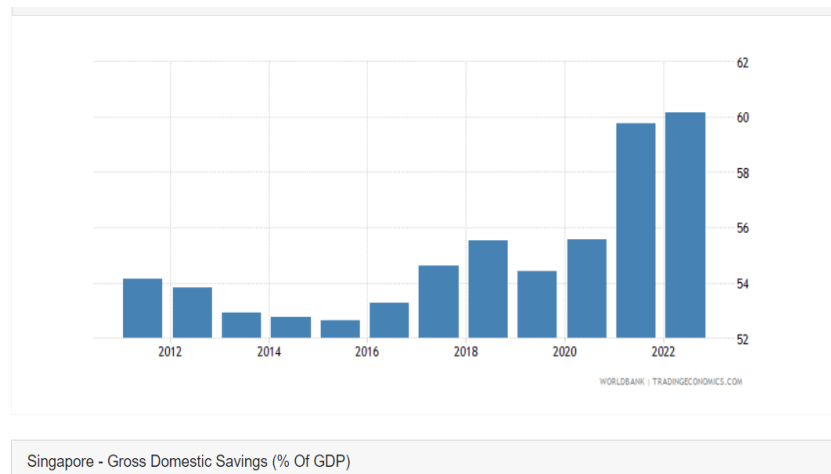
ratio in the world (around 400% on average during 2008-11) reflecting its position as a major transshipment hub and the high import intensity of Singapore's exports. As a result of this approach, fully two thirds of the domestic output of goods and services are exported. In fact, Singapore ranks 12th in the world in total exports and 15th in total imports, despite having a population of only 3 million.

Monetary Policy

Singapore uses an exchange-rate-based monetary-policy framework, which centres on managing the Singapore-dollar exchange rate instead of the interest rate. This is more suitable as import prices dominate Singapore's economy. This framework has been effective and provided a low-inflation environment good for sustainable growth, helping the economy deal with external economic shocks over the past decades. The stated objective of the Monetary Authority of Singapore (MAS) is to deliver medium-term price stability in order to facilitate sustainable growth in the Singapore economy.

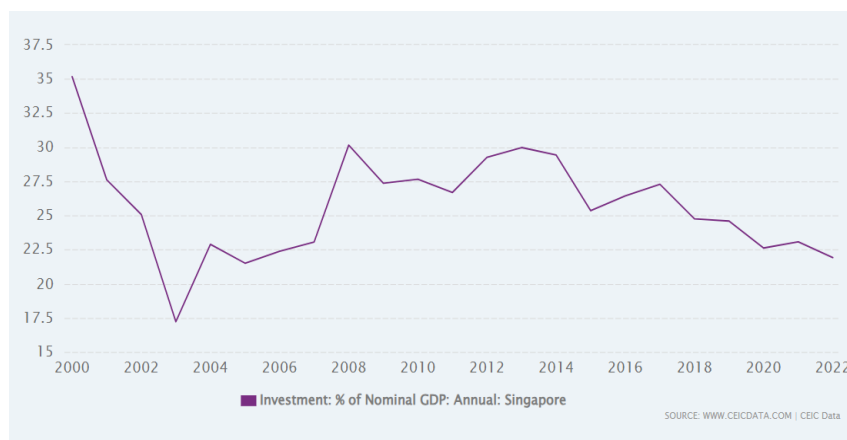
Under this system, MAS lets the local dollar rise or fall against the currencies of Singapore's main trading partners within an undisclosed band, also known as the Singapore dollar nominal effective exchange rate (S\$NEER). The band is set by MAS, the central bank, to "bring core inflation closer to its historical average of just under two per cent in the medium term".

Savings as a Percentage of GDP



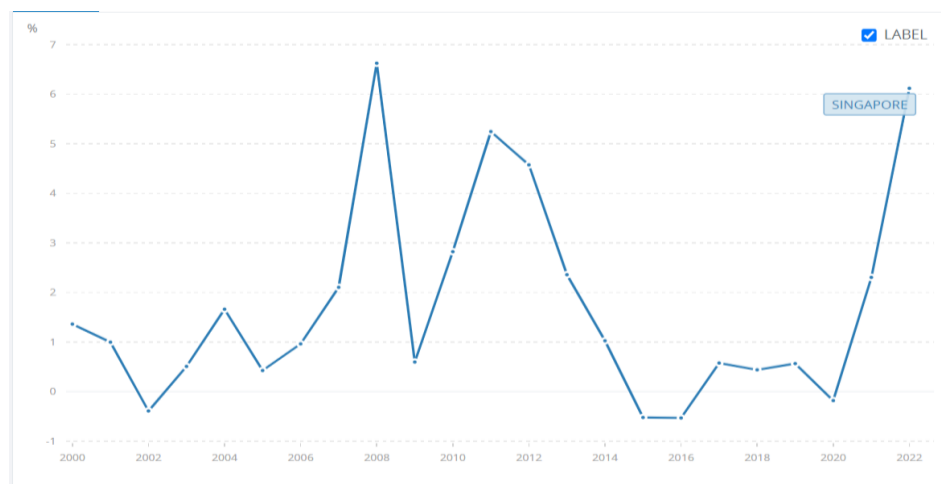
Gross domestic savings (% of GDP) in Singapore was reported at 60.13 % in 2022, according to the World Bank collection of development indicators, compiled from officially recognized sources.

Investments as a Percentage of GDP



Singapore Investment accounted for 21.9 % of its Nominal GDP in Dec 2022, compared with a ratio of 23.1 % in the previous year. It has an average ratio of 30.2 %. It seems to have been decreasing, which may be because they have already developed their country, and the growth would be rather slow now.

Inflation



Getting a bit into 2023 figures, Singapore's annual inflation rate rose to 4.7% in October 2023 from 4.1% in the previous month and above market expectations of 4.45%. It was the highest reading since May, mainly driven by an acceleration in prices for housing & utilities (3.9% vs 3.7% in September), transport (8.4% vs 6.3%), and recreation & culture (5.8% vs 4.3%). Additionally, inflation rose for education (2.7% vs 2.4%), health care (5.2% vs 4.5%), and miscellaneous goods & services (3.4% vs 2.6%). In contrast, costs of food slowed to 4.1% (vs 4.3%), the lowest level in one and a half years. Meanwhile, the annual core inflation increased to 3.3%, up from a prior 18-month low of 3.0%. On a monthly basis, consumer prices grew 0.2%, easing from a 0.5% rise in September. Consumers can expect more volatility in overall inflation in 2024 due to swings in global oil prices.

source: [Statistics Singapore](#)

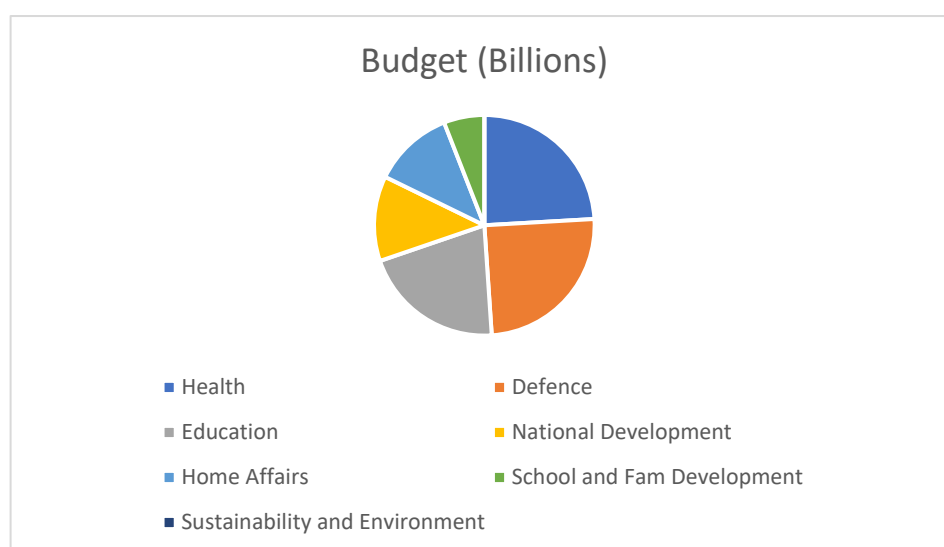
Conclusion of the Section

As per the GDP growth predictions Singapore is supposed to have an increased GDP growth, but it also forecasts a growth of inflation, so we can't say if this GDP growth will amount to anything, maybe marginally. Income has also significantly increased, however there have been inequalities in income distribution between the top and the bottom having a huge gap. Singapore's trade structure seems to be mainly dependant on imports and exports of intra industry trade of electrical machinery and equipment. As for FDI flows, Singapore has barely any restrictions,

setting up a business can be easy. Further, Singapore is a very trade open country, due to which there can be possible imbalance (exchange rate volatility, terms of trade shocks) through this channel, although which the country is sufficient in managing through its exchange-rate based monetary policy. Finally, talking about the Savings and Investments dynamics, while an increase in savings can contribute to financial stability, a simultaneous decrease in investment may indicate a cautious or risk-averse environment. If this trend persists, it might lead to a slowdown in economic growth over time.

IV. Sovereign Debt Analysis

First of all, let us review Singapore's Budget for the year 2023. The ministries that will receive the largest budgets are Defense with a total projected expenditure of \$17.98 billion, Education with a projected total expenditure of \$14.6 billion, and Health with a projected total expenditure of \$16.88 billion. In FY2023, the total expenditure across ministries is expected to hit \$104.2 billion, a slight increase from 2022's \$102.41 billion.



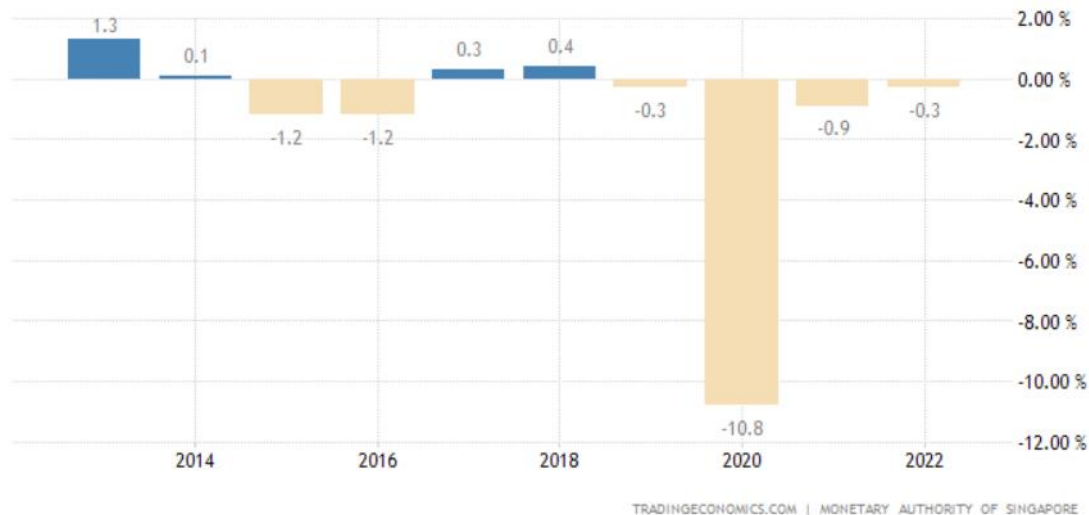
Singapore's Fiscal Approach

A pillar of Singapore's fiscal governance is that the Government has to operate on a balanced budget policy. It can only spend from the fiscal reserves accumulated in its term unless the President approves a draw on the Past Reserves. This framework has in turn allowed the Government to invest its reserves for long term returns. Part of these returns supplement government revenues, and forms one of the largest contributors to government revenues.

The Government likewise adopts a disciplined approach towards borrowing. Borrowings are not revenues, and have to be repaid. Hence, the Government does not borrow for spending needs, so as not to overly burden the future generations. Instead, the Government issues debt instruments to meet specific long-term objectives. This is known as the Net Investment Returns Contribution.

Trends in Fiscal Balance

| Actual | Previous | Highest | Lowest | Dates | Unit | Frequency |
|--------|----------|---------|--------|-------------|----------------|-----------|
| -0.30 | -0.90 | 21.23 | -10.80 | 1990 - 2022 | percent of GDP | Yearly |



As for its fiscal balance, Singapore has mainly had deficits than surpluses, but as we can see that they're so close to zero for the past 8 years, which proves the above-mentioned points about having a strict expenditure regime. The 2020 drop was mainly driven by lower revenues due to the dampened economic backdrop and significant spending to contain the Covid-19 pandemic.

Debt Sustainability Analysis

Purpose of Borrowing

The Singapore Government currently issues the following domestic debt securities for reasons unrelated to the Government's fiscal needs:

The Singapore Government operates on a balanced budget policy. In earlier decades of growth as an emerging economy, Singapore recorded healthy budget surpluses, which also contributed to the reserves. Singapore is one of the few countries in the world with a net asset position, and its financial assets are well in excess of its liabilities

Facilitate Debt Market Development and Other Non-Spending Purposes. Such borrowings are issued under the Government Securities (Debt Market and Investment) Act (“GSA”) for specific purposes such as to provide a benchmark risk-free yield curve and to meet the investment needs of the Central Provident Fund. Borrowings are also used to finance spending on major, long-term.

Size

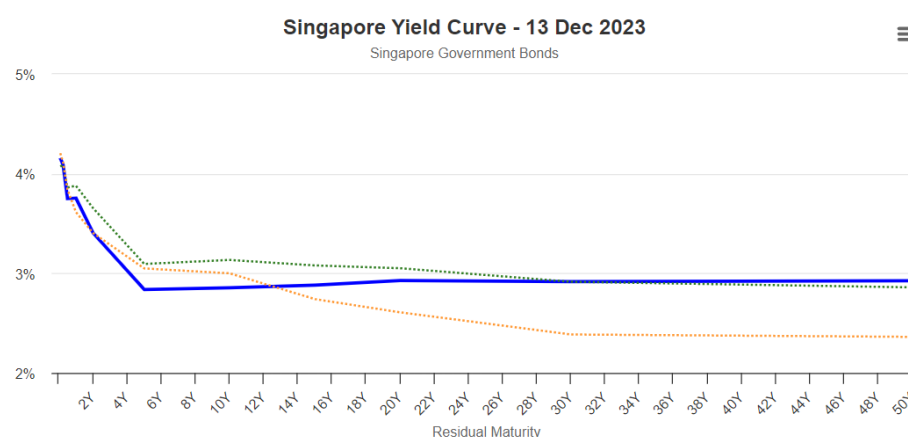
Total outstanding Government borrowing were S\$562b as at March 2019, and the borrowings are denominated in Singapore Dollar (i.e. no debt denominated in foreign currency). Currently, Singapore National Government Debt reached 810.9 S\$ bn in Sep 2023. And, it is actually the 6th largest in the world when expressed in Debt-GDP percentage.

Over the past few years, the Singapore Government has increased issuance of SGS steadily, at around 5% - 8% per annum. Market conditions have been supportive, driven by an increase in demand for high quality liquid assets from financial institutions. SSGS has also been increased to match higher CPF members’ balances. Market demand for Singapore’s debt securities has been strong and increasing over the past five years.

Maturity and Yield

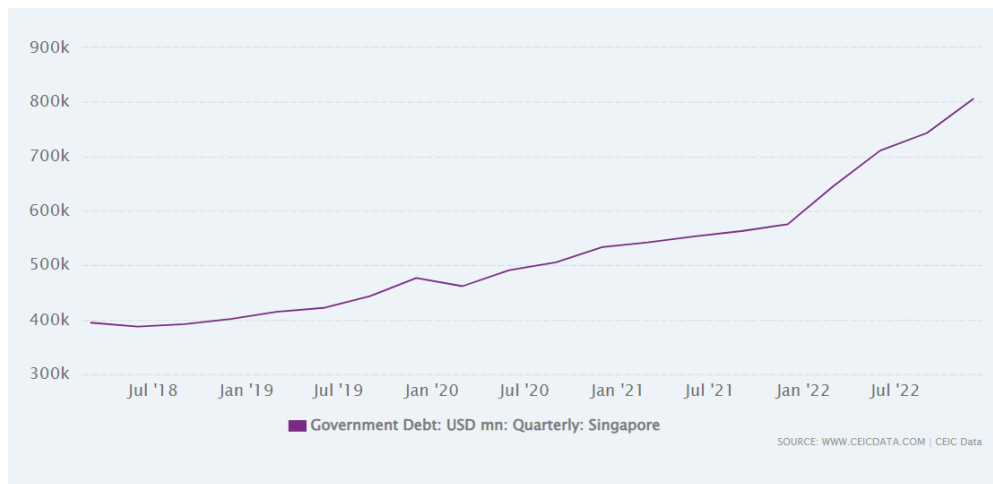
Singapore Government Securities (SGS) bonds are tradable debt securities that pay a fixed, semi-annual coupon. SGS bonds have typical maturities of 2, 5, 10, 15, 20, 30 or 50 years. The weighted-average maturity of outstanding SGS bonds and T-bills was 6.70 years as of March 2019.

Singapore Yield Curve



The Singapore yield curve is kind of inverted, Normally, longer-duration interest rates are higher than short-duration. So, the yield curve normally slopes upward as duration increases. For this reason, the spread (i.e. the yield difference) between a longer and a shorter bond should be positive. That is not the case of Singapore, usually this means that there are economic obstacles (slowdowns)

Debt Position



The level of Government debt outstanding at around S\$450b (2019) or 114% of Gross Domestic Product (GDP) appears large on its own. It increased to 131.19% in 2020. It is currently around S\$810. The gross debt-to-GDP ratio is a measure of a country's debt compared to its economic output. Some international reports list Singapore as having high levels of Government debt. However, this does not mean that Singapore is not fiscally sustainable. For Singapore, the use of gross debt figures does not provide a meaningful indicator of the country's fiscal strengths. The gross debt-to-GDP ratio does not consider the Government's sizeable asset position, which exceeds its liabilities for Singapore.

Net Debt

The Singapore Government has a strong balance sheet, with assets well more than its liabilities (i.e. no net debt). This can be seen from the investment returns that are made available for spending on the Government Budget – or Net Investment Returns Contribution (NIRC). Under the NIR framework, up to 50% of the long-term expected returns earned on the net assets (i.e.

assets net of liabilities) are available for spending. The NIRC of about S\$16 billion taken into the Government's budget in Fiscal year 2018 for spending means that even after deducting all the Government's liabilities (including CPF monies), the remaining net assets are sizeable, and they are expected to generate significant investment returns. If the Government's assets had not been adequate to meet its liabilities, there would be no contribution from the investment returns on net assets in the Government Budget.

Conclusion of the Section

The Singapore government highlights that they have net assets and not debts. A common metric of a country's debt position is its gross debt-to-GDP ratio, which measures a country's public debt compared to its economic output. While Singapore's gross debt-to-GDP ratio of 168% as at December 2022 (based on 2022 GDP at current price) may appear large on its own, it does not reflect Singapore's financial position. The gross debt-to-GDP ratio does not consider Singapore's sizeable asset position. Their financial assets are well in excess of their debts. This explains why Singapore receives the top credit rating of triple-A from the three leading international credit-rating agencies (S&P, Moody's, and Fitch).

V. Balance of payments

A country's balance of payments provides information about its international monetary transactions and can be an indicator of the economy's strength and competitiveness in the global system.

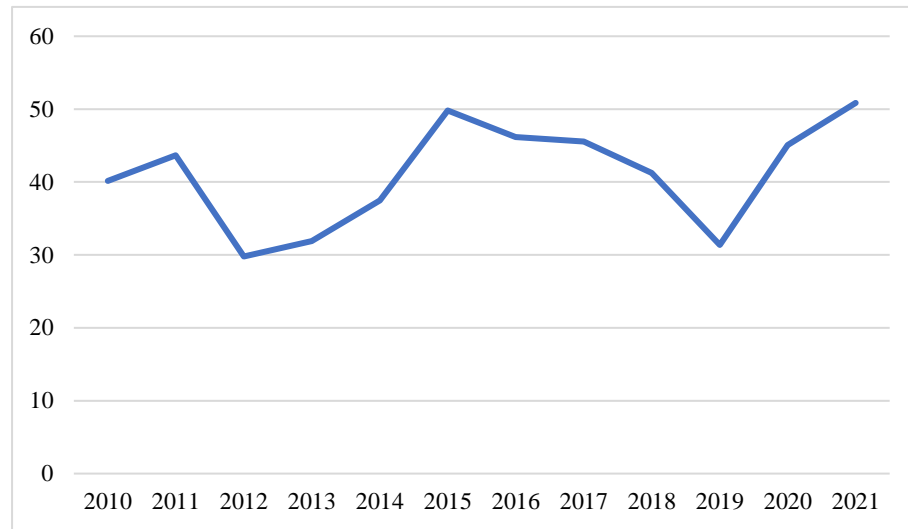


Fig. 24. Singapore's trade balance, billion USD

Source: WITS, 2023

Singapore has a surplus in the trade balance, which means that it exports more than it imports. It is worth mentioning that, in 2022, it was the country with the fifth-biggest trade surplus in U. S. dollars (The World Bank, 2022). Even though Singapore is a small country, it maintains a high positive trade surplus even in absolute numbers.

Now let us review Singapore's balance of payments and its dynamics. Balance of Payments consists of the current account and the capital and financial account. It summarizes the economic transactions between Singapore residents and non-residents. As of 2022, the current account surplus stood at 124 billion U. S. dollars at current market prices while the capital and financial account recorded net lending of 279 billion U. S. dollars (Figure 25). The overall balance of payments fell significantly in 2022 from its level in 2021, which was linked to an increased capital inflow. This was largely due to higher equity capital and retained earnings, which constituted the bulk of Singapore's inward direct investment flows in 2022.

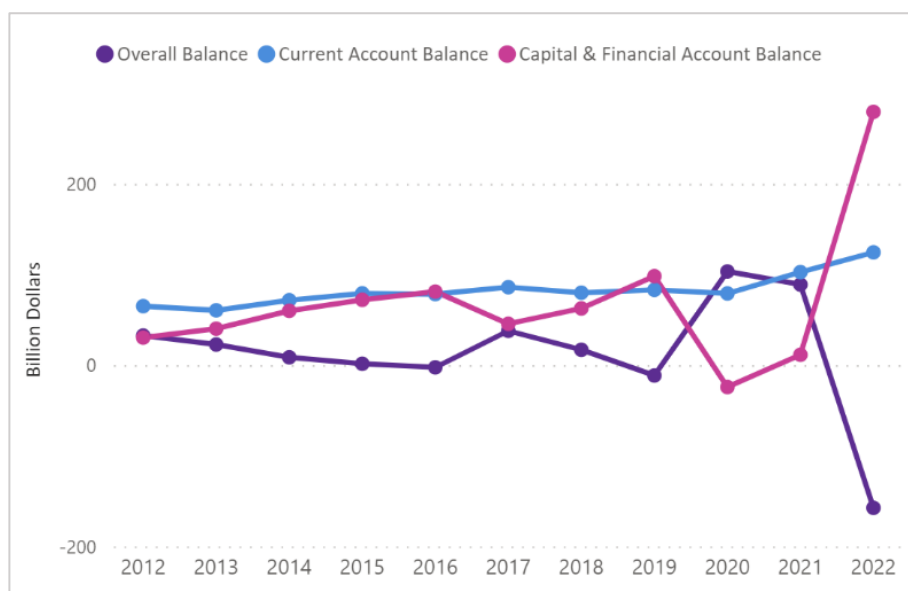


Fig. 25. Singapore's balance of payments in billion USD, 2012-2022

Source: Singapore Department of Statistics, 2023

Looking further into the composition of current account and its amount as a share of GDP can give us information about the international competitiveness of the economy. The current account balance in Singapore averaged 17.4% of GDP in the decade leading to 2022, which is above the Asia-Pacific region's average of 1.9% of GDP. The 2022 reading was 19.3% of GDP (Figure 26), which is a sign of the economy being internationally competitive and taking active participation in trade. In 2022, Singapore's current account amounted to 90.2 billion U. S. dollars – a positive number, which means it was a creditor to the rest of the world.

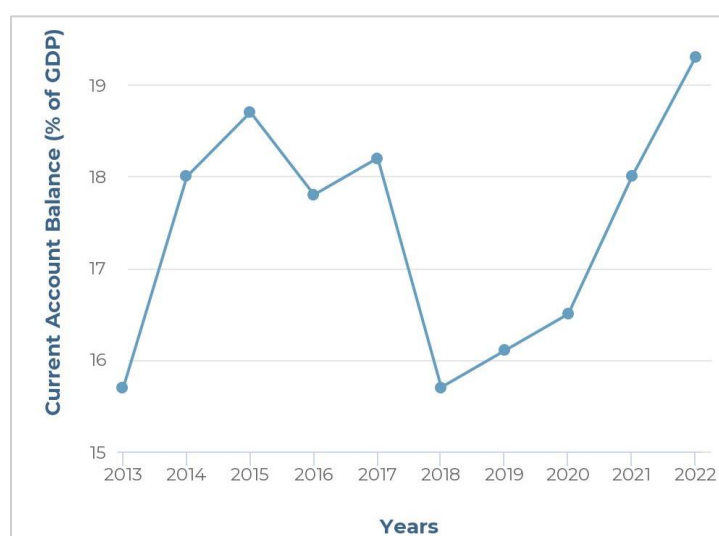


Fig. 26. Singapore's current account balance in % of GDP, 2013-2022

Source: Singapore Department of Statistics, 2022

The surpluses in current account in Singapore have historically been attributed to positive trade balances, with goods account surpluses being the main driver of current account balances since 1995 (Figure 27). A sharp increase in the surplus in the services balance from 2020 to 2021 was driven by a shift from net payments to net receipts for other business services, lower net payments for travel services and charges for the use of intellectual property and an increase in net receipts from financial services and maintenance and repair services (Ministry of Trade and Industry of Singapore, 2020).

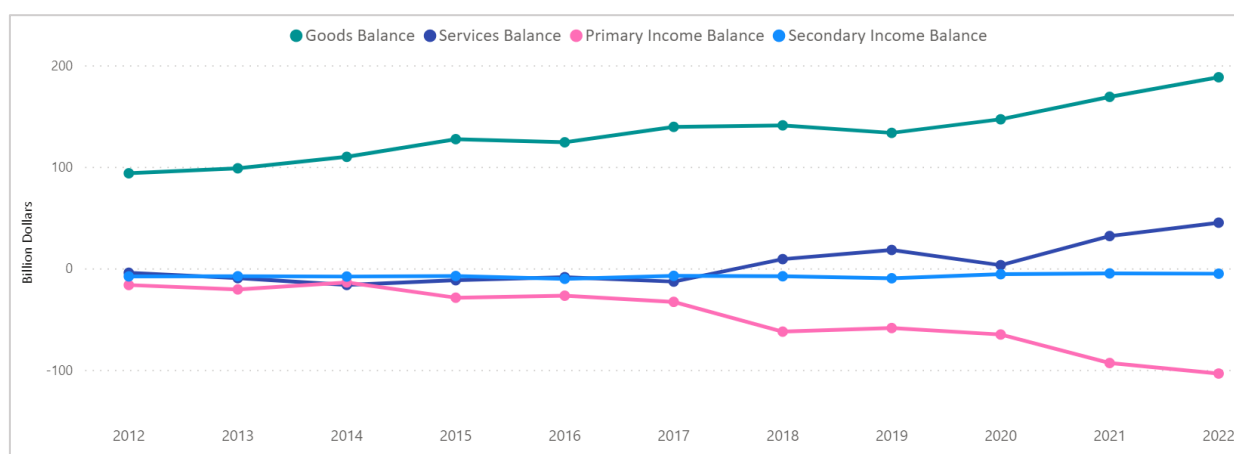


Fig. 27. Main components of Current Account in billion USD, 2012-2022

Source: Singapore Department of Statistics, 2023

In the last decade, Singapore has generally been a net creditor nation in international investment. Net borrowing in 2020 switched back to net lending from 2021 onwards, due to the reversal of other investment to net outflows (Figure 28).

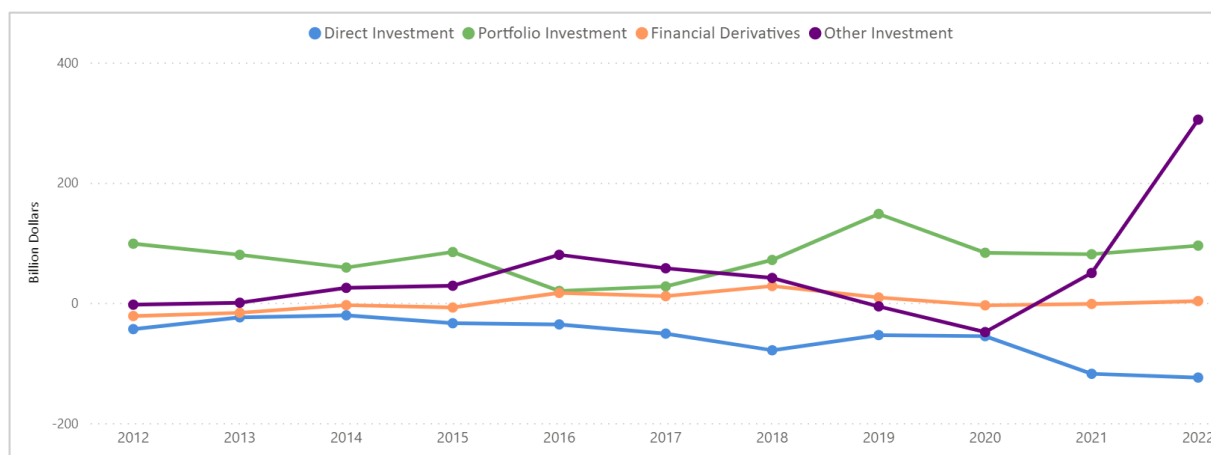


Fig. 28. Functional categories of Financial Account in billion USD, 2012-2022

Source: Singapore Department of Statistics, 2023

A positive trade balance and a constant capital inflow has allowed Singapore to accumulate substantial amounts of reserves. Total reserves comprise holdings of monetary gold, special drawing rights, and holdings of foreign exchange under the control of monetary authorities. The principal function of reserve assets is to provide or absorb the liquidity necessary to facilitate the adjustment of an imbalance of payments between a country and the rest of the world, which means that with this big amounts of reserves Singapore can be considered a trustworthy and stable economy, even though it does not currently have a concerning imbalance of payments. Reserve assets of Singapore have been growing during the last decade and have reached their peak at 425 billion U. S. dollars in 2021 (Figure 29).

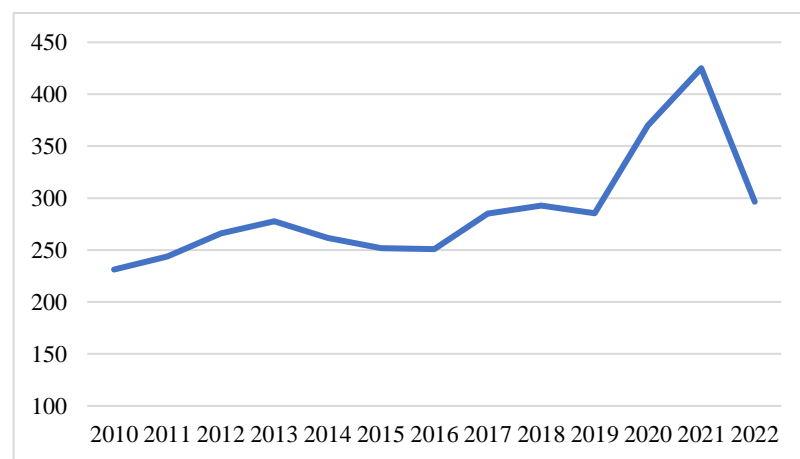


Fig. 29 Total reserves in current billion USD, 2010-2022

Source: The World Bank, 2022

The investment returns from Singaporean official foreign reserves (classified as “other reserve assets” by the IMF) are also growing and provide additional resources for government spending. The ability to tap into the reserves is a significant financial advantage for Singapore. This situation is unlike the situations in many other countries that have to service their debts and other liabilities from their budgets and, thus, raise taxes or borrow further. In Singapore, the government is able to take money from the investment returns of their reserves to supplement the budget. The few other countries where governments are able to derive net investment income for public spending are typically those with substantial reserves of natural resources such as oil (Ministry of Finance of Singapore, 2023).

In conclusion, Singapore's balance of payments presents it as a mostly net creditor and does not indicate any need to adjust an external imbalance. A positive imbalance is generally considered to be acceptable and beneficial for the economy.

VI. Strength of financial system

Singapore undoubtedly has a market-based financial system and, in addition, has one of the largest markets relative to the size of the banks. It means that it relies heavily on selling securities in the open market in order to get society's savings to firms, exert corporate control, and ease risk management. For example, Singapore has become the largest foreign exchange trading center in Asia and ranks second in interest rate derivatives trading (Lee & Phoon, 2014).

The strength of Singapore's financial system is indisputable.

The solvency and profitability of the country's banks compare well to those of other financial centers. Banks' risk-weighted capitalization is strong and provides 7 additional percentage points that can be used in case of a crisis. Although capital ratios are lower than those seen in other financial centers, they are comparable to other international banks and reflect the conservative approach to risk-weighted asset calculation in Singapore. Singapore's Domestic Systemically Important Banks (D-SIBs) have a leverage ratio of 7.2%, higher than the 6% average for Globally Systemically Important Banks (G-SIBs). Banks in Singapore enjoy higher stable net interest margins than banks in other financial centers and also benefit from rising fee and commission income. Nonperforming loans (NPLs) – loans that have a high chance of not being paid back – are low, especially for D-SIBs (only 1.9% of total loans) (IMF, 2019).

Banks' liquidity positions are also quite sturdy. D-SIBs rely on non-bank customer deposits for funding (73%). Overall bank liquidity is adequate, thanks to strong liquidity in Singapore dollars, and DSIBs have healthy buffers over the minimum liquidity coverage ratio (LCR) requirements in all currencies and in Singapore dollars (Ibid).

Nevertheless, there are some risks that can affect the stability of the Singaporean financial system. Exposures to regional and global shocks are the most relevant vulnerabilities for Singapore as of now. Regardless of the trigger, global and regional shocks, such as a growth shock in key emerging markets or heightened volatility in global capital markets, would have a significant impact on banks in Singapore and its financial system. Moreover, given the size and cross-border

interconnectedness of the financial system, especially with the rest of Asia, such risks could have a major impact not only on Singapore, but also on the financial systems in the region. One of the main macrofinancial risks is related to a sharp growth slowdown in China that could trigger, including via regional spillovers, credit stress and a rise in NPLs.

According to a recent review of the Singaporean banking system, banks in Singapore have remained resilient over the last year, with strong capital and liquidity positions supported by healthy profits. Nonetheless, banks could face higher credit costs as debt repayment capabilities of borrowers could weaken amid persistently high interest rates (Monetary Authority of Singapore, 2023).

The analysis by the Monetary Authority of Singapore also showed that climate transition also poses a serious threat to Singapore's financial system, because, as we have seen in Section 2 of this review, the Singaporean economy is currently highly dependent on oil for its energy supply. In the scenario of abrupt transition to a decarbonized economy, this disorderly transition could be potentially destabilizing and disruptive for the financial system and could result in significant financial losses for financial institutions. Financial institutions in Singapore need to engage their corporate clients to develop and execute credible transition plans to enable an early and orderly transition (Ibid).

To sum up, Singapore's financial system is one of the most significant and well-known strengths of its economy. The attractiveness of Singapore as a global financial center is underpinned not only by the notion of "tax haven", but also strong economic fundamentals, sound economic policies, and a sophisticated financial oversight framework. The financial system is exposed to global and regional macrofinancial shocks through significant trade and financial channels but appears resilient even under adverse scenarios.

VII. Social and political dynamics

Political Stability and Lack of Violence/Terrorism: Based on the World Bank's collection of development indicators, Singapore's percentile rank was reported as 96.64% in 2021. Singapore uses a Westminster Parliamentary system that has been modified. Since 1959, the People's Action Party dominates. However, politics over World Bank's numbers is not enough.

The Political and Economic Risk Consultancy (PERC) Group has consistently assessed Singapore's domestic political risk as low. Since 1997, on a scale of between zero and 10, with zero being the best grade possible and 10 the worst, the city-state's worst grade for domestic political risk was below 3 (PERC 2005). Singapore's scores hover mostly around the 2 mark. PERC partly attributes Singapore's low domestic political risk to the fact that it is 'very difficult for a formal political opposition to unseat the PAP (People's Action Party) from power even if there were a vibrant multi-party system' (PERC 2005). It kind of acts as a soft authoritarian regime.

Social Stability:

Global human resource consulting firm Mercer has ranked Singapore as the best city in Asia for quality of life. The 2018 World Happiness Report names Singapore as the "Happiest country in South-east Asia." The study also demonstrated that, in Singapore, the family is the fundamental social unit and that, above all materialistic aspirations, the family and community always come first. Thus, a happy and contented society is developed.

| | World Ranking | | | |
|-----------------------------|---------------|-------|-------|------|
| | 2020 | 2021 | 2022 | 2023 |
| Corruption Perception Index | 3/180 | 4/180 | 5/180 | N/A |
| IMD World Competitiveness | 1/63 | 5/64 | 3/63 | 4/64 |

Fig. 30. Social and Economic Indices

Source: World Bank, IMD, Transparency International

Singapore has a remarkable CPI, it's ranked for instance 4 in 2021, with a score of 85, which says that it's very clean country, with less corruption. Singapore also has high competitiveness values.

VIII. Conclusion

Although Singapore is a very small country and does not dispose of an abundance of land and resources, it has learned to manage its economy well to become one of the richest and most developed nations in the world. Its GDP per capita ranks as the world's highest, with a promising forecast for continued growth.

The country's geographical position offers some natural advantages, as it is situated at the crossroads of commerce between East and West, between the Indian and the Pacific Ocean. The port has allowed Singapore to develop into the natural trade centre for Southeast Asia, a position which has since been enhanced by the provision of excellent airport facilities and an up-to-date telecommunication system.

Singapore boasts a robust and highly skilled workforce, reflecting the fourth-highest labor productivity rate globally. However, the nation heavily relies on foreign workers to satisfy its demand in human resources, which presents a risk and has proved to be a major setback during the Covid-19 pandemic.

Singapore faces challenges, notably an elevated inflation rate and a remarkably high level of income inequality, as reflected by a big GINI coefficient compared to other nations.

The country maintains a low-tariff regime and embraces a high level of trade openness, leading to a positive trade balance. Singapore primarily engages in high value-added industries. The services industry, particularly in transport, finance, and telecommunications, is well-developed, contributing significantly to the overall economic landscape.

Singapore has an exchange rate-based monetary policy, which, while supporting economic growth, does not necessarily contribute to maintaining price stability. Despite a seemingly high growth of debt, Singapore's fiscal sustainability remains intact due to its substantial asset position. The country maintains a flexible FDI policy, stimulating capital inflow and enhancing economic development. Singapore enjoys a strong, market-based financial system, where banks exhibit

sound levels of liquidity, solvency and profitability. Government bonds are ranked AAA by all leading estimation agencies.

The balance of payments is positive, driven by a robust goods trade balance. However, Singapore's high level of integration into the global and regional financial system poses risks, as it is increasingly exposed to spill-over effects or could trigger crises in the region itself. Political issues could arise in the country, but it is believed to be socially stable.

In conclusion, Singapore's economic success is due to a highly efficient and well-structured environment. Despite challenges like inflation, income inequality, scarce resources and growing competition in the Asian region, the nation's strategic policies, skilled workforce, and economic diversity contribute to its status as a global economic leader.

References

- A very open economy. (n.d.). <https://www.mas.gov.sg/who-we-are/mas-gallery/explore-our-gallery/zone-b/sustained-non-inflationary-economic-growth/a-very-open-economy>
- CEICdata.com. (2018, June 1). *Singapore gross savings rate*. Economic Indicators | CEIC. <https://www.ceicdata.com/en/indicator/singapore/gross-savings-rate>
- CEICdata.com. (2018b, June 1). *Singapore investment: % of GDP*. Economic Indicators | CEIC. <https://www.ceicdata.com/en/indicator/singapore/investment--nominal-gdp#:~:text=Key%20information%20about%20Singapore%20Investment,an%20average%20ratio%20of%2030.2%20%25.>
- CEICdata.com. (2020, July 10). *Singapore National Government debt*. <https://www.ceicdata.com/en/indicator/singapore/national-government-debt#:~:text=Singapore%20National%20Government%20Debt%20reached,bn%20in%20the%20previous%20quarter.>
- Cooper, S. (2022, May 19). *Singapore might have large gross debt but their credit rating is AAA. find out why - Commodity.com*. Commodity.com. <https://commodity.com/data/singapore/debt-clock/>
- Cue. (2023, November 23). *S'pore core inflation edges up to 3.3% in October, breaking streak of slower price increases. The Straits Times*. <https://www.straitstimes.com/business/economy/s-pore-core-inflation-edges-up-to-33-in-october-breaking-streak-of-prices-rising-at-slower-pace#:~:text=%E2%80%9CWhile%20inflation%20has%20been%20moderating,4.1%20per%20cent%20in%20September.>
- Cue. (2023a, February 20). *Budget 2023: Highlights of spending plans by 7 ministries for the year ahead. The Straits Times*. <https://www.straitstimes.com/singapore/budget-2023-highlights-of-spending-plans-by-ministries-for-the-year-ahead>

GovBonds. (2023, October 28). *Singapore Government bonds - yields curve*. World Government Bonds.

<https://www.worldgovernmentbonds.com/country/singapore/#:~:text=The%20Singapore%2010Y%20Government%20Bond,last%20modification%20in%20December%202023>

HKTDC Research. (n.d.). <https://research.hktdc.com/article/MzIwNzUzMTE0>

<https://www.businesstimes.com.sg/international/singapore-budget-2021/budget-2021-record-deficit-s649b-fy2020>

<https://www.edb.gov.sg/en/business-insights/market-and-industry-reports.html>

<https://www.mof.gov.sg/docs/default-source/resource/gst/pdf/10-is-the-singapore-government-heavily-in-debt.pdf>

Income distribution and poverty / Compare your country. (n.d.).

<https://www.compareyourcountry.org/inequality/en/0/315/default/2019>

International Energy Agency (IEA) (2022) Singapore. Available at:

<https://www.iea.org/countries/singapore>.

International Labor Organization (ILO) (2022) *ILO Modelled Estimates and Projections (ILOEST)*

Database. ILOSTAT. Available at: <https://ilostat.ilo.org/topics/labour-productivity/>.

International Monetary Fund (IMF) (2019) *Singapore Financial System Stability Assessment*.

IMF Country Report No. 19/224, July.

Kennard, A. et al. (2023, December 7). Singapore. Encyclopedia Britannica.

<https://www.britannica.com/place/Singapore>

Lee, D. K. C. and Phoon, K. F. (2014). Singapore's Financial Market: Challenges and Future Prospects. *Handbook of Asian Finance: Financial Markets and Sovereign Wealth Funds*.

1, 171-194. Available at: https://ink.library.smu.edu.sg/lkcsb_research/4613

Ministry of Finance of Singapore (2023) *What comprises the reserves and who manages them?*

Available at: <https://www.mof.gov.sg/policies/reserves/what-comprises-the-reserves-and-who-manages-them>.

Ministry of Finance of Singapore / *Singapore has high levels of Government debt as reported in the CIA Public Debt Factbook. Is this fiscally sustainable?* (n.d.).

<https://ask.gov.sg/mof/questions/clgotv5yd00bfi908u3fomcri>

Ministry of Trade and Industry of Singapore (2020) *Economic Survey of Singapore 2021*.

Available at: <https://www.mti.gov.sg/Resources/Economic-Survey-of-Singapore/2021/Economic-Survey-of-Singapore-2021>.

Monetary Authority of Singapore (2023) *Financial Stability Review*. Available at:

<https://www.mas.gov.sg/-/media/mas-media-library/publications/financial-stability-review/2023/financial-stability-review-2023.pdf>

Monetary policy. (n.d.). <https://www.mas.gov.sg/monetary-policy>

MTI forecasts GDP growth of “Around 1.0 per cent” in 2023 and “1.0 to 3.0 per cent” in 2024.

(n.d.). <https://www.mti.gov.sg/Newsroom/Press-Releases/2023/11/MTI-Forecasts-GDP-Growth-of-Around-1-0-Per-Cent-in-2023-and-1-0-to-3-0-Per-Cent-in-2024#:~:text=The%20Ministry%20of%20Trade%20and,3.0%20per%20cent%20in%202024.>

National Population and Talent Division (2022) *Population Overview*. Available at:

<https://www.population.gov.sg/our-population/population-trends/overview/>.

PricewaterhouseCoopers. (n.d.). *Singapore Budget 2023 | PWC Singapore*. PwC.

<https://www.pwc.com/sg/en/publications/singapore-budget/2023.html>

Rumbaugh, T. (n.d.). *VI Singapore’s experience as an open economy*. IMF eLibrary.

<https://www.elibrary.imf.org/display/book/9781557754639/ch006.xml>

Singapore Budget 2023. (n.d.). International Trade Administration | Trade.gov.

<https://www.trade.gov/market-intelligence/singapore-budget-2023>

Singapore Country Risk Report & Analysis | Allianz Trade in USA. (n.d.). Corporate.

https://www.allianz-trade.com/en_US/resources/country-reports/singapore.html

- Singapore Department of Statistics (2022) Balance of Payments. Available at:
<https://www.singstat.gov.sg/find-data/search-by-theme/economy/balance-of-payments/latest-data>.
- Singapore market Analysis :: Fitch Solutions. (n.d.).
<https://www.fitchsolutions.com/region/singapore>
- Singapore Political stability - data, chart | TheGlobalEconomy.com. (n.d.).
 TheGlobalEconomy.com.
https://www.theglobaleconomy.com/Singapore/wb_political_stability/
- Singapore Trade openness - data, chart | TheGlobalEconomy.com. (n.d.).
 TheGlobalEconomy.com.
https://www.theglobaleconomy.com/Singapore/trade_openness/#:~:text=The%20latest%20value%20from%202022,133%20countries%20is%2099.14%20percent.
- Singapore. (n.d.). World Economics. <https://www.worldeconomics.com/National-Statistics/Informal-Economy/Singapore.aspx>
- Singapore. (n.d.-b). Coface. <https://www.coface.com/news-economy-and-insights/business-risk-dashboard/country-risk-files/singapore#Debt-Collection>
- Singapore. (n.d.-c). Coface. <https://www.coface.com/news-economy-and-insights/business-risk-dashboard/country-risk-files/singapore>
- Statista. (2023, March 28). *Distribution household monthly income Singapore 2020, by income level.* <https://www.statista.com/statistics/1375257/singapore-household-income-distribution-by-level/>
- Statista. (n.d.). *Economic inequality - Singapore | Statista market forecast.*
<https://www.statista.com/outlook/co/socioeconomic-indicators/economic-inequality/singapore#:~:text=The%20gini%20coefficient%20in%20Singapore,to%201.13m%20in%202023.>

The World Bank (2020) GDP growth (annual %) – Singapore. Data set. Available at :

[https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2022&locations=SG
&start=1995](https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2022&locations=SG&start=1995)

The World Bank (2020) *Human Capital Country Brief 2020. Singapore.* Available at:

<https://www.worldbank.org/en/publication/human-capital#Briefs>.

The World Bank (2021) *Human Capital Country Brief 2020. Singapore.* Available at:

<https://www.worldbank.org/en/publication/human-capital#Briefs>.

The World Bank (2022) External balance on goods and services (current US\$) - Singapore. Data set. Available at:

https://data.worldbank.org/indicator/NE.RSB.GNFS.CD?end=2022&most_recent_value_desc=true&start=2022&view=bar

The World Bank (2022) Total reserves (includes gold, current US\$) - Singapore. Data set. Available at:

https://data.worldbank.org/indicator/FI.RES.TOTL.CD?end=2022&locations=SG&most_recent_value_desc=true&start=2010.

Trading economics. (n.d.). *Singapore - Political Stability and Absence of Violence/Terrorism:*

Percentile Rank - 2023 Data 2024 Forecast 1996-2021 historical.
<https://tradingeconomics.com/singapore/political-stability-and-absence-of-violence-terrorism-percentile-rank-wb-data.html>

United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2022 Revision.

World Bank Open Data. (n.d.-b). *World Bank Open Data.*

<https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?end=2022&locations=SG&start=2000>

World Integrated Trade Solution (WITS) (2023) Singapore trade balance, exports and imports.

Data set. Available at:

<https://wits.worldbank.org/CountryProfile/en/Country/SGP/Year/2010/TradeFlow/EXPI>
[MP#](#).