



# BRUNEI ECONOMIC UPDATE

JULY 2021

## Highlights

### Recent Developments

- Although global economic activity has gained pace, the recovery is uneven amid highly unequal vaccine access. COVID-19 caseloads have fallen sharply in advanced economies as vaccine rollouts have been rapid, but new infections are still elevated in many parts of the world. The spread of the Delta variant is clouding the global economic outlook.
- Global trade has continued to grow strongly and freight rates have soared due to port congestion and shortage of containers. Commodity prices have retraced in part due to a moderation of Chinese demand, and global financial conditions have tightened on expectations of stronger growth and higher inflation.
- The Brunei economy contracted by 1.4 percent y/y in Q1, following a decline in the previous quarter, largely due to lower crude oil, natural gas, and LNG production. The services sector registered modest growth in Q1, after four consecutive quarters of contraction.
- Brunei's trade balance returned to surplus following strong exports of crude oil and other petroleum and chemical products in March and April, despite record-high levels of mineral fuel imports. Inflation moderated to 1.1 percent y/y in April and May. The fiscal deficit narrowed slightly due to higher oil receipts and tax revenue.

### Special Feature: Economic diversification in oil-exporting countries

- Export concentration in oil-exporting countries is much higher than the rest of the world, and the gap between the two groups has widened over the past half-century. Oil-exporting countries achieved some diversification success from the mid-1980s to the late-1990s when oil prices were in a slump. However, this trend reversed during the decade-long oil price boom in the 2000s.

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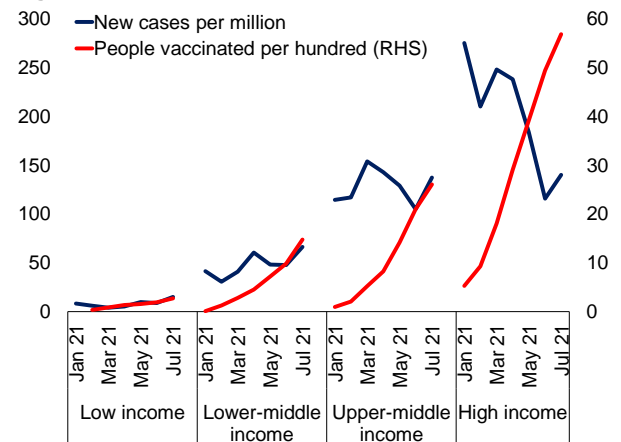
## Recent Global Developments

**Uneven recovery and vaccine rollouts.** The global recovery has continued to gain pace, but the Delta coronavirus variant is dimming the global economic outlook. Furthermore, the recovery is uneven and largely reflects sharp rebounds in some major economies, amid highly unequal vaccine access. Although a quarter of the world's population has received at least one COVID-19 vaccine dose, this average conceals enormous regional and income disparities. Vaccinations are significantly skewed towards advanced economies, with the United States having administered vaccines to 57 percent of the population while only a paltry 3 percent have been vaccinated in Africa. In high income countries, caseloads have declined sharply as vaccine rollouts have been rapid (Figure 1). By contrast, average new daily cases were higher in July than in January in low and middle income countries amid slow progress in vaccinations.

**Strong rebound in major economies.** China's economy grew by 18.3 percent year-on-year (y/y) in Q1 as industrial production and export growth remained robust and service sector activity improved (Figure 2). However, there are signs of moderation in Q2 as policy stimulus is gradually scaled back. In the United States, the economy recovery has been solid, with GDP growth at 0.4 percent y/y in Q1 after three consecutive quarters of negative growth. The rebound has been driven by large fiscal support, combined with rapid vaccine rollout and the gradual relaxation of mobility restrictions. The labour market also improved, with 850 thousand additional jobs in June and initial jobless claims falling to 364 thousand for the week ending June 26, a new pandemic-era low. Euro Area output contracted by 1.3 percent y/y in Q1, weighed down by a renewed surge in COVID-19 cases and extended restrictions in some large economies. However, high-frequency indicators point to a pickup in activity in Q2, with manufacturing PMI reaching a record-high of 63.4 in June. Japan's recovery has been delayed, as the economy contracted by 1.5 percent y/y in Q1. Private consumption was particularly weak due to a reimposition of stringent measures to curb rising infections. Consumption is likely to have improved in Q2, with the services PMI rising to 48.0 in June from 46.5 in May, indicating a softer reduction in services demand in the current 17-month sequence of downturn.

**Global trade strong despite supply disruptions.** Global goods trade has continued to grow strongly after surpassing pre-pandemic levels in November last year. The sustained rise in manufacturing trade, combined with supply bottlenecks and global value chain disruptions, have contributed to a sharp rise in shipping prices (Figure 3). Services trade has also started to rebound. Air transport demand has risen, buoyed by strong recovery in the United States and China. The number of total flights in the first half of the year was 25 percent higher than in 2020 but still 11 percent below 2019 levels (Flightradar24 2021). However, tourism remains depressed amid the emergence of COVID-19 variants and continued travel restrictions. Global tourist arrivals from January to May were 85 percent lower than in 2019 (UNWTO 2021). Meanwhile, domestic tourism continues to rebound in many parts of the world.

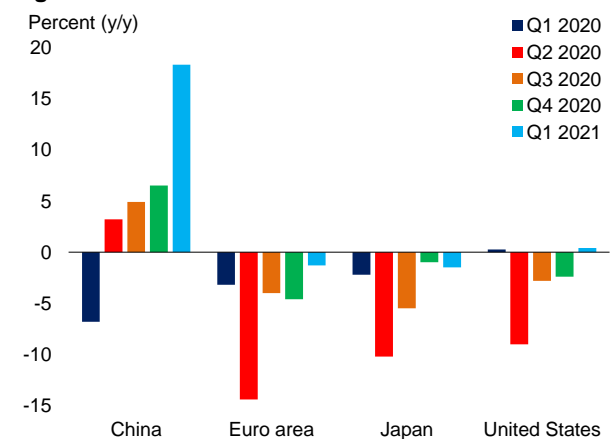
**Figure 1. Global COVID-19 cases and vaccinations**



Source: Our World In Data, World Bank

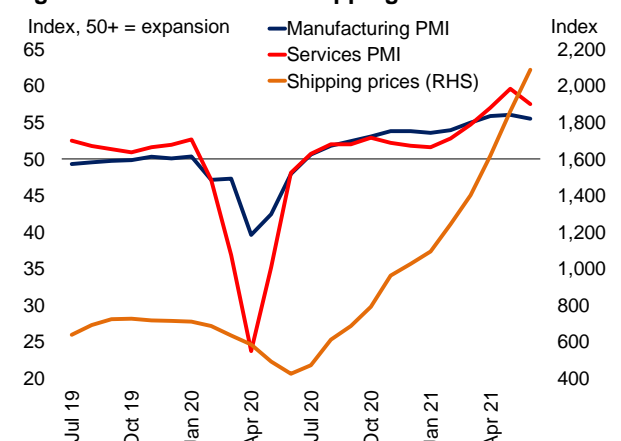
Note: New daily cases based on monthly averages. People vaccinated as of month end. World Bank country classifications by income level. Last observation is July 31, 2021.

**Figure 2. Growth in 2021Q1**



Source: OECD

**Figure 3. Global PMI and shipping rates**



Source: Harpex Petersen, Haver Analytics, IHS Markit, J.P.Morgan

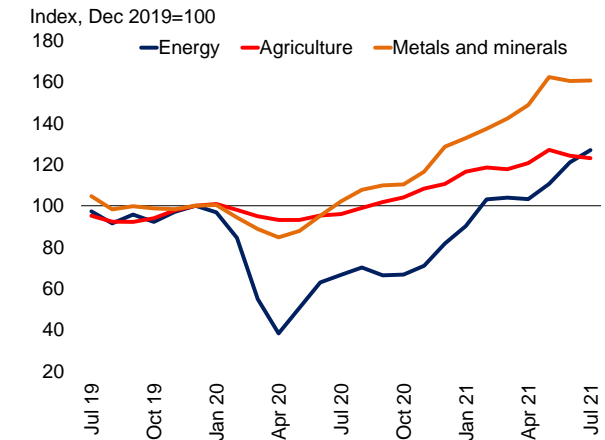
Note: PMI (Purchasing Managers' Index) readings above (below) 50 indicate an expansion (contraction). Shipping rates based on the Harpex index, which reflects worldwide prices on the charter market for container ships. Last observation is June 2021.

**Partial pullback in commodity prices.** Commodity prices rebounded strongly in 2021, with most well above pre-pandemic levels (Figure 4). Brent crude oil prices surpassed US\$77 per barrel in early July—the highest since October 2018—but fell to below US\$70 per barrel in mid-July as the spread of the Delta variant fuelled concerns of a slowdown in the economic recovery and OPEC+ reached a delayed deal to boost production by 400 thousand barrels per day each month from August. OPEC+ had earlier failed to reach an agreement after the United Arab Emirates demanded a higher starting point for its quota to reflect its increased production capacity. Metal prices have also rallied markedly, largely supported by strong demand from China—which consumes roughly half of the world’s industrial metals. Copper prices reached an all-time high of US\$10,725 per tonne in early May, but have since declined following a moderation in Chinese copper imports and a recovery of ore supply, particularly in Latin America.

**Modest tightening in financial conditions.** Financial conditions have tightened following the global recovery but remain generally accommodative. Expectations of stronger growth and higher inflation have pushed up yields on long-term government bonds, and hence higher borrowing costs. The U.S. Federal Reserve signalled it has begun discussions of reducing bond-purchase programs but there have been substantially less market disruptions than the 2013 taper tantrum (Figure 5). Capital flows to emerging market and developing economies (EMDEs) have stabilised somewhat after outflows in March. There may be episodic capital outflows in the context of rising long-term yields and a stronger U.S. dollar. However, current accounts and exchange rates of EMDEs are more favourable compared to the run-up to the 2013 taper tantrum. Capital flows to EMDEs are therefore projected to improve relative to last year.

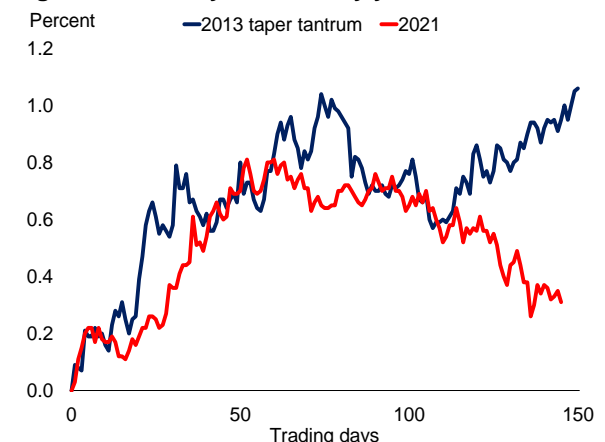
**Improved global outlook.** Following a 3.5 percent contraction in 2020, global economy activity has gained significant momentum. The global economy is projected to expand by 5.6 percent in 2021—its strongest post-recession growth rate in 80 years (World Bank 2021; Figure 6). Global recovery is expected to continue into 2022, with growth moderating to 4.3 percent and still about 2 percent below pre-pandemic projections. Growth in advanced economies is expected to be strong at 5.4 percent in 2021, driven by large fiscal support especially in the United States (President Joe Biden’s US\$1.9 trillion fiscal stimulus package), widespread vaccination to reach herd immunity that will speed the normalisation of economic activity, and the release of sizable pent-up demand. The recovery in EMDEs, excluding China, is more modest at 4.4 percent in 2021, with about two-fifths of countries facing downward growth revisions, reflecting continued disruptions from the pandemic and the partial withdrawal of policy support. Significant downside risks remain, including the possibility of large COVID-19 waves due to new virus variants and financial stress amid elevated debt levels in EMDEs.

**Figure 4. Commodity prices**



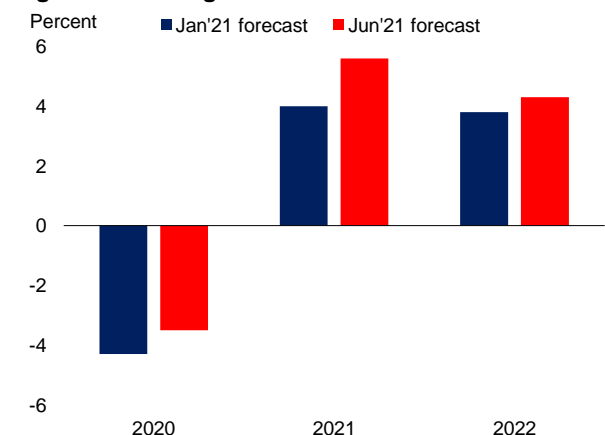
Source: World Bank  
Note: Last observation is July 2021.

**Figure 5. U.S. 10-year Treasury yields**



Source: Federal Reserve Bank of St. Louis  
Note: Cumulative change after May 21, 2013 for the 2013 taper tantrum, and January 1, 2021 for 2021. Last observation is July 30, 2021.

**Figure 6. Global growth outlook**



Source: World Bank  
Note: Global growth projections made in January and June 2021.

## Recent Regional Developments

**COVID-19 relapse.** Resurgent COVID-19 outbreaks in the region show that the pandemic is far from over. New cases in ASEAN fell from around 24,000 per day in end January to 10,000 per day in early March, but then rose rapidly to a peak of 94,000 per day in end July. The emergence of new variants and the relaxation of mobility restrictions likely contributed to the sharp rise in infections. In Malaysia, the number of daily new cases jumped to more than 500 per million people in end July, surpassing even India, which was the epicentre of the pandemic earlier during the year (Figure 7). Indonesia, Myanmar, Thailand, and Vietnam have also seen a steep rise in infections. Lockdown measures have been reinstated in these countries, and the continuous cycle of “on-and-off” closures and re-openings will adversely affect the economy.

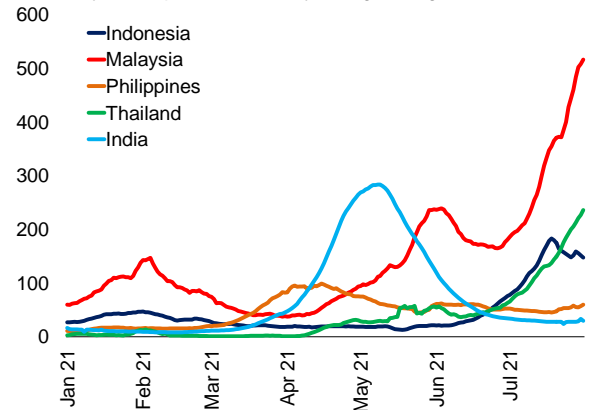
**Slow vaccine rollouts.** Some ASEAN member states (AMS) continue to face difficulties in expediting procurement and rolling out vaccination programs due to supply-side constraints and a lack of healthcare facilities and workers. These include transport, storage, and logistics issues, particularly for vaccines that need to be stored at ultralow temperature freezers. Vaccination coverage is still limited and behind the global average in these AMS (Figure 8). Singapore is aiming to vaccinate the entire population by the end of 2021, while in others this is expected to happen only by the end of 2022 or later. Vaccine hesitancy is also a concern in some countries. A recent survey in July found that Thailand had the highest vaccine hesitancy among Southeast Asian countries—only 70 percent of Thais were willing to be vaccinated, down from 81 percent in December 2020 (YouGov 2021). Meanwhile, in Indonesia, Malaysia, and the Philippines, vaccine willingness has improved markedly compared to the start of the year.

**Massive fiscal support.** Governments have responded to the pandemic using various measures to support firms, workers, and households, such as providing direct income through government transfers, liquidity via government loans to the private sector, tax cuts or exemption, and loan payment relief or deferment. Fiscal support in 2020 had been substantial, and was much larger than during the 2008-09 global financial crisis, as is evident from changes in the general government balance as a share of GDP (Figure 9). With government spending rising and revenue falling, budget deficits and public debt have increased significantly, resulting in reduced fiscal space that may hamper governments’ capacity to respond to future crises.

**Growth to rebound in 2021.** Growth in Southeast Asian economies is projected to rebound in 2021, except for Myanmar, weighed down by political turmoil (AMRO 2021). The healthy turnaround in manufacturing and robust demand in China is expected to benefit countries that are deeply integrated in global value chains and heavily dependent on exports, such as Malaysia, Singapore, and Thailand. Tourism-dependent countries, particularly Cambodia, the Philippines, and Thailand, are likely to see stronger growth in 2022 when travel and tourism gradually returns.

**Figure 7. New daily COVID-19 cases**

New daily cases per million, 7-day rolling average

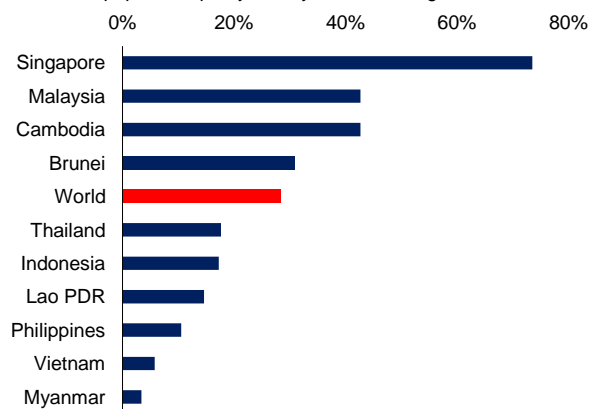


Source: Our World In Data

Note: Last observation July 31, 2021.

**Figure 8. Vaccination coverage**

Share of population partly or fully vaccinated against COVID-19

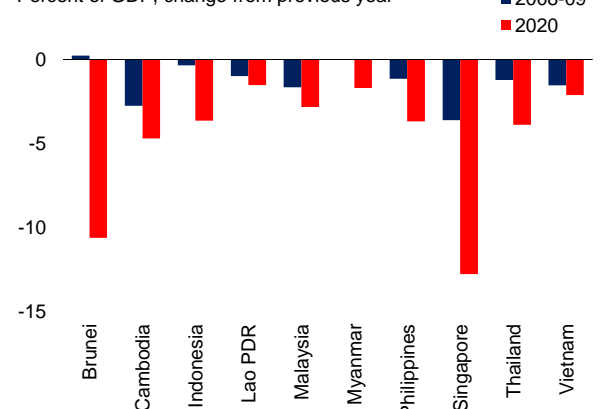


Source: Our World In Data

Note: Data as of end July 2021, except Myanmar as of early June 2021.

**Figure 9. Fiscal policy responses**

Percent of GDP, change from previous year



Source: IMF

Note: Fiscal policy response refers to the change in the general government balance as a percentage of GDP. Data for 2008-09 is the average change over the two years.

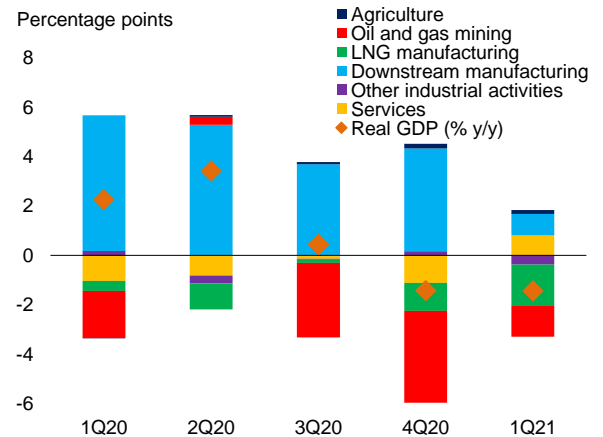
## Recent Developments in Brunei

**Consecutive quarters of negative growth.** The Brunei economy contracted by 1.4 percent y/y in 2021 Q1, following a 1.4 percent decline in the previous quarter (Figure 10). The negative Q1 growth was largely due to a contraction in oil and gas mining (-3.1 percent), manufacturing of LNG (-11.4 percent), and construction (-16.6 percent). Crude oil production fell to 114.9 thousand barrels per day (tbp/d) from 116.3 tbpd in 2020 Q1, while LNG production decreased to 886.9 thousand Million British Thermal Units per day (mmbtu/d) from 1,001.5 thousand mmbtu/d over the same period. The decline in the upstream oil and gas sector was attributed to unanticipated production disruptions, while the slump in construction was due to limited availability of migrant workers and shortage of raw materials amid border closures. On the other hand, strong growth was recorded in the downstream oil and gas sector, particularly manufacturing of petroleum and chemical products, as well as in agriculture, retail trade, restaurants, health services, and business services. The downstream sector has become the main driver of growth since Hengyi Industries began production in November 2019. The agriculture sector and the manufacturing of food and beverage products continued their impressive growth in Q1, expanding by 21.5 percent and 30.7 percent, respectively. The services sector grew by 2.2 percent, after four consecutive quarters of contraction.

**Surge in retail sales and domestic tourism.** Domestic retail businesses continue to benefit from travel restrictions, as reflected in the increase in the retail sales index by 11.9 percent y/y in Q1. International travel and tourism remain deeply depressed, and a recovery is not imminent given the emergence of potentially more infectious and deadly COVID-19 variants and a new wave of infections globally. As of mid-July, the total number of aircraft landings at the Brunei International Airport was about 90 percent lower than the same period in 2019. The air transport sub-sector declined by 87.6 percent y/y in Q1. Meanwhile, domestic tourism has benefitted from more resident spending within the country, and hotel occupancy rates have been trending upwards after reaching their troughs in May last year (Figure 11). Despite this positive development, domestic tourism cannot totally make up for the loss of international travel. Some tourism services remain badly affected by the pandemic. For instance, the travel agency and tour operator sub-sector contracted by 77.5 percent y/y in Q1.

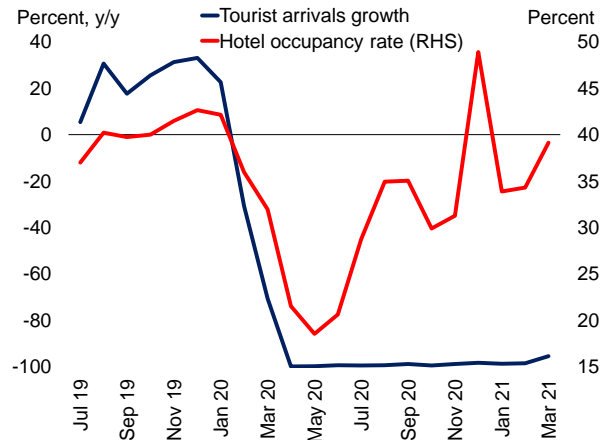
**Improved fiscal balance.** Brunei's fiscal deficit narrowed slightly to 20.3 percent of GDP in Q1 (24.0 percent of GDP in 2020Q4) on the back of higher oil and gas receipts and tax revenue, despite an increase in spending (Figure 12). Oil prices have recovered strongly from last April's troughs, with Brent crude averaging US\$60.6 per barrel in Q1 and US\$68.6 per barrel in Q2. The recovery in prices remains the fastest on record following a major oil price collapse (Figure 13). Oil prices are expected to drop back somewhat following a new OPEC output agreement and the spread of the Delta coronavirus variant. Still, Brunei's fiscal deficit is projected to narrow in 2021, primarily driven by higher oil and gas revenue.

Figure 10. Sectoral contribution to GDP growth



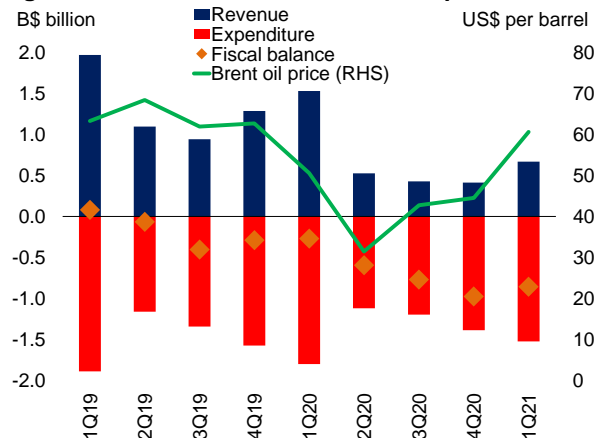
Source: CSPS, Department of Economic Planning and Statistics  
Note: Other industrial activities include non-oil and gas manufacturing, utilities, and construction.

Figure 11. Tourist arrivals and hotel occupancy rate



Source: CSPS, Ministry of Primary Resources and Tourism  
Note: Last observation is March 2021.

Figure 12. Government finance and oil price



Source: CSPS, Treasury Department, World Bank



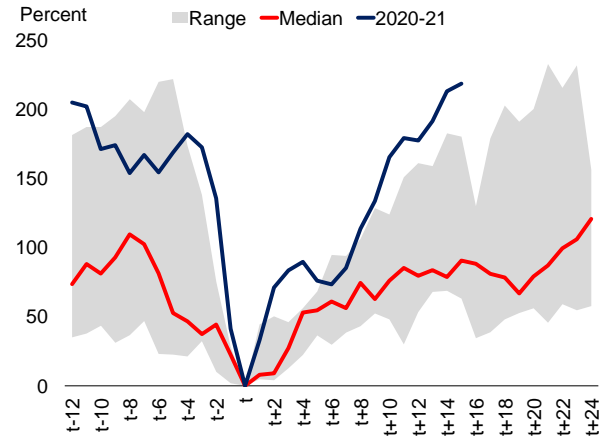
**Trade balance back to surplus.** Gross merchandise exports increased markedly in March and April, after a lacklustre first two months of the year, driven largely by exports of crude oil and other petroleum and chemicals products (Figure 14). The value of crude oil exports was bolstered by the increase in oil prices, while external demand for downstream products has nearly recovered to pre-pandemic levels. However, LNG exports remained subdued. Meanwhile, mineral fuel imports, used mainly as feedstock for the production of refined petroleum products, continued to rise and reached a record-high in April. Overall, the trade account balance returned to surplus in Q1, after falling into deficit in the second half of 2020, and remained positive in April despite the surge in fuel imports.

**Inflation retraced moderately.** Headline inflation, as measured by the y/y percent change in the Consumer Price Index (CPI), increased by an average of 1.8 percent in Q1 but moderated to 1.1 percent in April and May (Figure 15). Positive inflation rates have been recorded for 18 consecutive months since December 2019. The recent price increases have been largely attributed to higher prices of food products (especially vegetables, fruits, and meat), vehicle purchases, and air transport. Insurance premiums, after rising steeply in 2020, have been mostly flat in 2021, while prices of clothing, furniture, household appliances, and accommodation services have declined. However, supply-side constraints have begun to lift producer price inflation in major economies, which could have an impact on the prices of imported goods in the coming months. Global freight rates have soared amid port congestion and shortage of containers, and global food commodity prices have risen due to pandemic-induced production disruptions.

**Vaccination program underway.** The national COVID-19 immunisation program commenced on April 3. The Ministry of Health (MOH) aims to inoculate at least 70 percent of the population. The country has secured sufficient vaccines through the COVAX facility and direct procurement from vaccine manufacturers. The first phase of the program covered frontline workers, adults aged 60 and above, and students who will be studying abroad. Following a slower-than-expected pace of vaccination, MOH ran an opt-in program from May 6 to May 29 for those who would like to be vaccinated early. The second phase started on June 21, with eligibility reserved for teachers, childcare workers, and adults at higher risk from coronavirus. Since July 5, all individuals aged 18 and above are eligible to receive the vaccine under the third phase of the program. As of July 31, about 30 percent of the population has received at least one dose of the COVID-19 vaccine.

**Growth outlook remains robust, but uncertainty looms.** Despite a contraction in Q1, the Brunei economy is still projected to grow modestly in 2021, reflecting broad-based growth across sectors as external demand and domestic activity strengthen. Another sustained wave of the pandemic is a key downside risk, possibly due to new variants or slow progress in vaccine rollouts, which could hamper the global recovery and push down commodity prices. Unanticipated domestic oil and gas supply disruptions also present a material downside risk to the outlook.

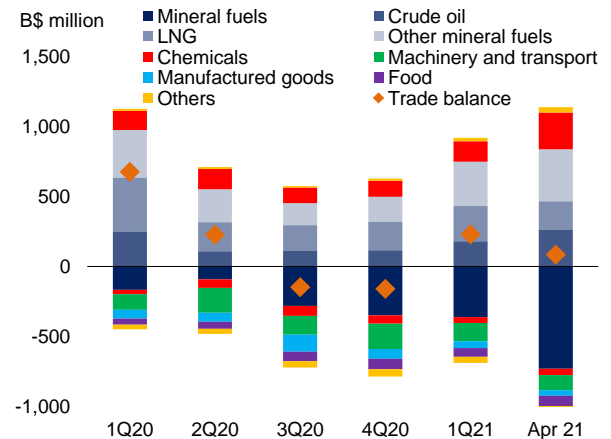
**Figure 13. Brent crude oil price recoveries since 1980**



Source: CSPS, World Bank

Note: t denotes the trough of oil price collapses. The median and range of are based on previous major oil price collapse and revival episodes, with t in July 1986, December 1998, December 2001, December 2008, and January 2016. The current episode is 2020-21, with t in April 2020.

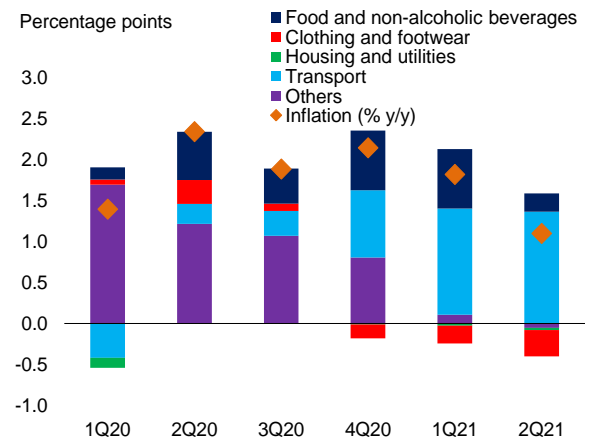
**Figure 14. Trade**



Source: CSPS, Department of Economic Planning and Statistics

Note: Quarterly values are the three month averages. Exports (imports) indicated by positive (negative) values.

**Figure 15. Contribution to inflation by category**



Source: CSPS, Department of Economic Planning and Statistics

Note: 2Q21 is the average of April and May 2021 data.

## Special Feature

### Economic diversification in oil-exporting countries

#### *Introduction*

Economic diversification has long been viewed as a policy priority for resource-dependent countries. This urgency is often underscored by the boom and bust cycles of commodity prices, as was the case in 2015 and, more recently, during the COVID-19 pandemic. Diversification helps to lower volatility by stabilizing export revenues and hence provide a more stable path for growth and development. Besides buffering against commodity price shocks, economic diversification also matters because it is generally accompanied by industrial upgrading through technology diffusion and a shift toward higher productivity sectors and high-paying jobs. Moreover, there is a need to prepare for future resource depletion and avoid unpleasant side effects arising from a resource windfall. Manifestations of this “resource curse” include the Dutch disease, coined after the decrease in manufacturing exports in the Netherlands following the discovery of gas in the North Sea in the late 1950s.

There are three important dimensions of economic diversification: (i) GDP diversification – increasing non-resource sectoral contributions of output and employment; (ii) export diversification – increasing the variety of goods and services sold and the number of destination countries; and (iii) fiscal diversification – broadening the government revenue base. The bulk of available literature on economic diversification focuses on export diversification as it easier to measure. In this special feature, we document the empirical regularities of export diversification in oil-exporting countries over the past half-century and review Brunei’s progress in diversifying away from oil and gas.

#### *Trends in export concentration*

To assess how oil-exporting countries have fared in their quest for economic diversification, we examine the trends in export diversification over a 50-year period, building on recent work by Ross (2019). A more complete analysis should cover other dimensions of diversification; unfortunately, data are either unavailable or unreliable for a large number of oil-exporting countries. We use the IMF’s Export Diversification Index to measure export product concentration, where a higher value indicates lower diversification. It covers 200 economies over the period 1962-2014. An oil-exporting country’s diversification index can be dominated by oil price swings, hence obscuring changes in the export mix or the number of trading partners. The IMF’s index mitigates this issue by using data on bilateral trade flows to measure export diversity. More specifically, it measures separately the active export lines of a country (goods that have been exported in the past) and the inactive export lines (goods that have not been exported) using the most detailed classification of the United Nations Harmonized Commodity Description and Coding Systems (HS). Index changes would indicate whether diversification came from existing or new product lines. In general, a country is classified as an oil exporter if fuel exports make up at least 20 percent of total merchandise exports. We also refer to classifications by the IMF and World Bank and apply judgement. Table SF1 lists the 40 oil-exporting countries, of which the majority are emerging market and developing economies. The list includes long-term producers, such as OPEC members and its allies, as well as newer producers.

Figure SF1 shows how export concentration has evolved for the 40 oil-exporting countries as a group (blue line) since 1962, compared to the rest of the world (red line). We document three important trends. First, export concentration is higher in oil exporters than in non-oil exporters. Unsurprisingly, export concentration is even higher in OPEC producers and their allies (dashed blue line). Second, there was a divergence in export concentration between the oil exporters and the rest of the world. By 2014, non-oil exporters have managed to diversify their exports to a much greater extent than oil exporters, as is evident in the widening gap between the two groups. Third, oil exporters were relatively successful in reducing export concentration during the mid-1980s and 1990s when oil prices were in a slump. However, this trend reversed after 1998 when oil prices experienced a decade-long boom, rising from US\$13 per barrel in 1998 to US\$96 per barrel in 2014. The relationship between export concentration and oil prices can be seen from Figure SF2, which shows that changes in diversification is closely correlated with oil price movements.

Figure SF3 compares the export concentration levels in 1998 (horizontal axis) and 2014 (vertical axis), for both the oil exporters (blue circles) and the rest of the world (red circles). Countries above (below) the 45 degree diagonal line are those whose export concentration increased (decreased) over the period. It is striking to see that most oil exporters increased their export concentration levels. On average, the index rose by 0.51 in oil-exporting countries, compared to an increase of 0.09 in the rest of the world. Figure SF4 takes a closer look at the oil exporters. The largest increases in concentration were in Azerbaijan, Venezuela, Turkmenistan, Kazakhstan, and Trinidad and Tobago. The countries in Central Asia began production after the breakup of the Soviet Union in 1991, and hence have had less time to diversify their economies. Of the countries that diversified, some did so as reserves were depleting (e.g. Bahrain, Syria, and Yemen) or were under sanctions (e.g. Iran).



**Table SF1. List of oil-exporting countries**

Country	Fuel exports (% of merchandise exports)			Oil rents (% of GDP)	Oil production (thousand barrels per day)	GDP per capita (current US\$)
	1961-1980	1981-2000	2001-2019	1970-2019	1973-2020	2019
Algeria	84.1	97.0	97.6	18.3	1,416	3,974
Angola	36.9	90.1	96.3	27.6	859	2,791
Azerbaijan	n/a	72.1	89.6	21.5	568	4,793
Bahrain	65.7	9.9	66.5	5.1	62	23,504
Bolivia	13.6	26.9	42.7	2.6	43	3,552
Brunei	99.4	98.1	94.1	22.5	169	31,087
Cameroon	3.1	34.6	40.6	4.4	102	1,507
Canada	9.1	10.9	22.2	1.6	2,617	46,190
Chad	3.4	n/a	n/a	21.0	55	710
Colombia	9.8	24.4	49.6	3.4	588	6,429
Congo, Rep.	31.9	89.6	65.3	28.9	189	2,280
Ecuador	27.8	46.3	49.3	8.4	372	6,184
Egypt	15.3	48.8	33.2	10.3	701	3,019
Equatorial Guinea	6.9	9.7	n/a	27.1	124	8,132
Gabon	46.7	82.8	84.1	23.6	235	7,767
Indonesia	54.6	43.9	26.6	6.4	1,279	4,136
Iran	90.8	85.5	73.3	21.3	3,672	5,550
Iraq	32.4	97.0	98.6	38.8	2,245	5,955
Kazakhstan	n/a	37.1	67.3	13.1	1,208	9,813
Kuwait	91.4	70.5	94.0	45.1	2,127	32,000
Libya	99.5	98.5	95.6	40.2	1,375	7,686
Malaysia	10.1	16.5	15.2	5.0	648	11,414
Mexico	12.5	32.1	11.2	4.0	2,606	9,946
Nigeria	58.0	96.3	92.1	12.9	2,010	2,230
Norway	9.7	50.2	63.1	4.7	1,811	75,420
Oman	96.9	85.2	81.1	40.6	770	15,343
Qatar	110.5	84.8	88.2	36.6	943	62,088
Russia	n/a	44.2	59.8	8.1	8,949	11,585
Saudi Arabia	99.5	92.0	86.6	39.2	9,083	23,140
South Sudan	n/a	n/a	n/a	31.9	135	n/a
Sudan	1.0	9.3	82.9	7.0	129	442
Syria	66.4	66.2	56.4	15.3	329	n/a
Trinidad and Tobago	84.8	65.4	63.6	11.5	143	17,398
Tunisia	25.5	22.3	11.3	5.3	84	3,317
Turkmenistan	n/a	70.0	n/a	14.1	191	6,967
United Arab Emirates	93.5	38.9	55.2	23.9	2,433	43,103
United Kingdom	4.4	10.6	9.8	0.7	1,689	42,329
Venezuela	92.9	83.1	88.0	18.8	2,434	n/a
Vietnam	n/a	20.1	13.2	4.0	207	2,715
Yemen	n/a	n/a	79.7	24.3	205	774

Source: CSPS, U.S. Energy Information Administration, World Bank

Note: Data are averages over the time period.

Figure SF1. Export concentration, 1962-2014

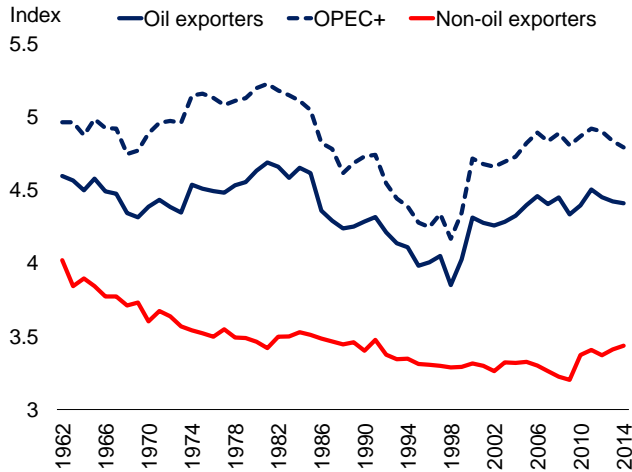


Figure SF2. Export concentration of oil-exporting countries and real oil prices

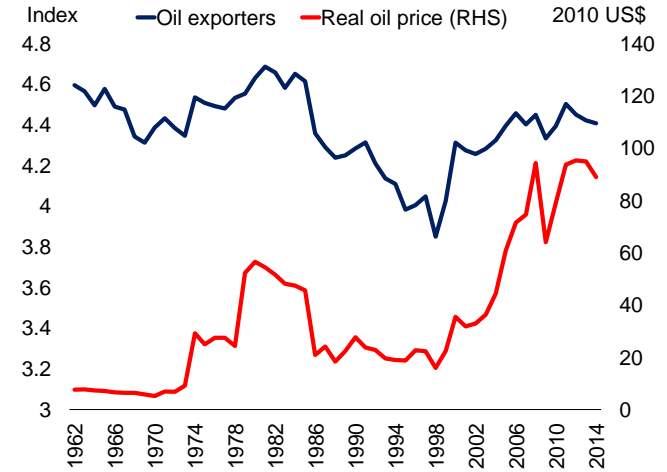


Figure SF3. Export concentration in 1998 and 2014

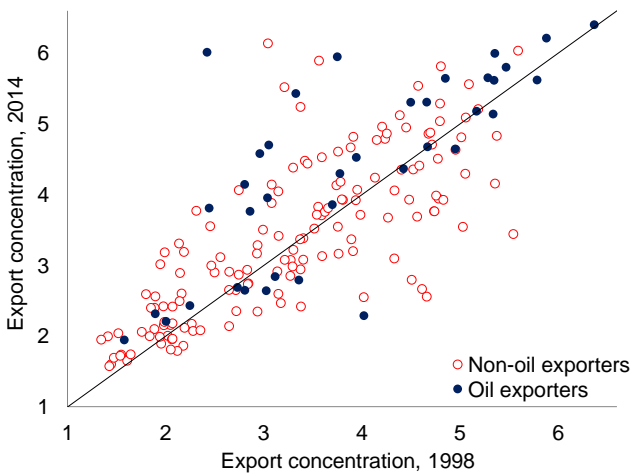


Figure SF4. Export concentration of oil-exporting countries in 1998 and 2014

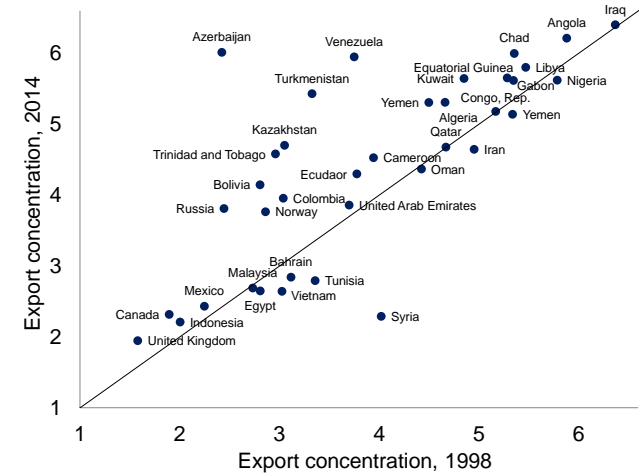


Figure SF5. Top 10 oil exporters and top 10 non-oil exporters by export concentration in 1970

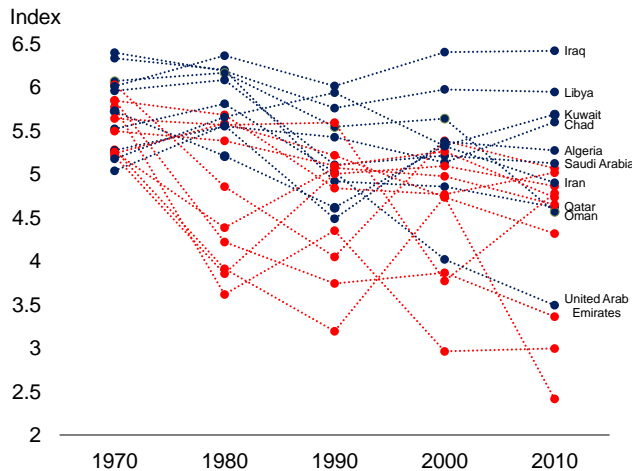
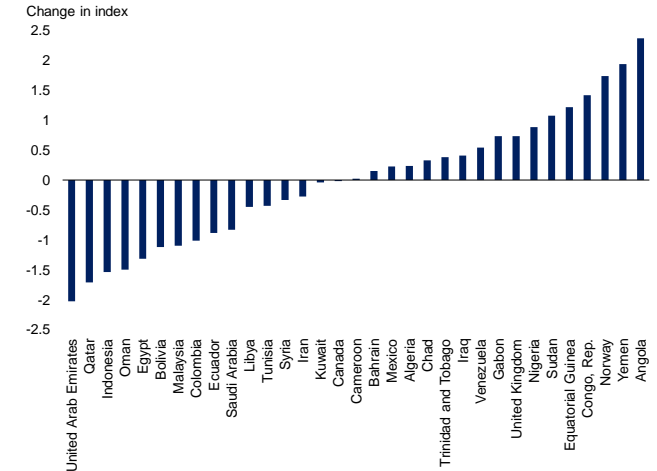


Figure SF6. Change in export concentration between 1970 and 2010



Source: CSPS, IMF, World Bank

Note: A higher index indicates greater export concentration. Data for Brunei only available from 2010 to 2014.

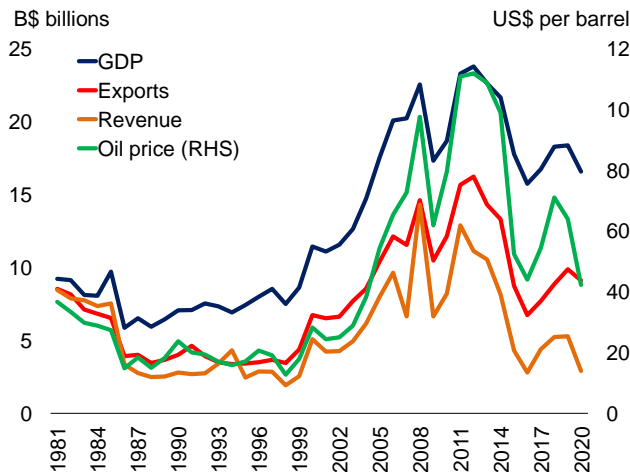
Countries typically diversify by moving from products they specialise in to others that require similar capabilities. In this context, oil might be incredibly hard to diversify from as the oil sector generates relatively few spillovers into other sectors. The economic complexity index proposed by Hidalgo and Hausmann (2009) measures how easy or difficult it is for countries to diversify into other export products. Crude oil is among the products with the lowest complexity rating, indicating that it shares very few characteristics with other products, and hence very difficult to diversify from.

There may be some evidence of oil's uniqueness with regard to export diversification. Figure SF5 shows the trajectories for the top 10 highly-concentrated oil exporters (blue) and for the top 10 highly-concentrated non-oil exporters (red) since 1970. In 2010, most of these oil exporters remain highly-concentrated whereas diversification progress can be seen in all the non-oil exporters, illustrating the difficulty of reducing oil dependence. Nonetheless, United Arab Emirates, Oman, and Qatar managed to achieve some diversification success. We repeat the same exercise for all oil-exporting countries. Figure SF6 displays the change in export concentration between 1970 and 2010. Other oil exporters that reduced their export concentration levels include Indonesia, Egypt, Bolivia, and Malaysia. These diversifiers may hold important lessons for other oil-exporting countries.

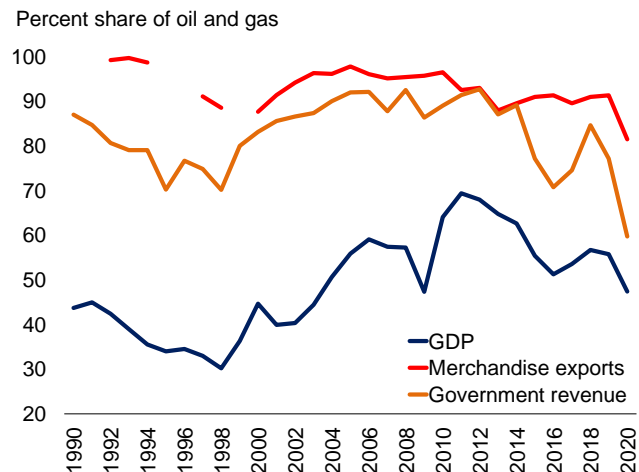
### *Economic diversification in Brunei*

Brunei's fundamental economic structure which centres on hydrocarbons has largely remained unchanged for decades. The high dependence on oil and gas is evident from Figure SF7, which shows GDP, exports, and government revenue co-moving with international oil prices. The volatility in oil prices also translates to volatility in Brunei's economy. Figure SF8 shows Brunei's trajectory in the three diversification dimensions. The experience of oil-exporting countries as a group, discussed in the previous section, broadly holds for Brunei. There was some indicative diversification success during the 1990s, but, similar to the trend of other oil exporters, concentration increased during the 2000s boom. Nonetheless, there has been substantial progress toward diversification in recent years, particularly after the commencement of Hengyi Industries' oil refinery and petrochemical operations. In 2018, oil and gas accounted for 57 percent of nominal GDP, 91 percent of merchandise exports, and 85 percent of government revenue. By 2020, the shares were 47 percent, 82 percent, and 60 percent, respectively.

**Figure SF7. Brunei GDP, exports, government revenue, and Brent crude oil price, 1981-2020**



**Figure SF8. Share of oil and gas in GDP, merchandise exports, and government revenue**



Source: CSPS, Department of Economic Planning and Statistics, IMF, World Bank

Policy advice offered to help oil-exporting countries diversify their economies usually focuses on improving the business environment, investing in human capital and infrastructure, and ensuring fiscal and monetary discipline. There is also recognition that there is no one-size-fits-all policy, and successful diversification requires taking into account the country's endowments, geography, institutions, governance, and implementation capacity.

In the case of Brunei, it should continue to exploit its competitive advantage in energy to build an internationally competitive industrial sector and by moving downstream and expanding into higher-value and niche markets. Co-locating petrochemical facilities with refineries as an operational synergy is an example of capturing more domestic value from hydrocarbons. The new ammonia and urea plant also has a competitive advantage as a result of relatively low input costs, such as land, labour, power, and feedstock (natural gas). Brunei can also tap into the huge potential of renewables, especially the abundant solar resources.



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