• Containing the spread of COVID-19 is currently every country’s nightmare. It is a public health scare, as much as it is forcing the economies into a spin — less foreign exchange is being earned, while uncertainties and risks of expropriation of investments are also high.

• As COVID-19 pandemic continues, the turbulence of foreign exchange rates becomes a serious policy concern. But the impact of the pandemic on the exchange rate in Papua New Guinea (PNG) is difficult to assess, while the success of monetary policies to smooth fluctuations in the exchange rate at times of crisis are also limited.

• So, in addition to strict foreign exchange controls over currency trading by banks, the Government has to consider managing the benefits from mineral and petroleum exports by a sovereign wealth fund, and to build its foreign exchange reserves.

• Adequate foreign exchange reserve holdings should help support market confidence during the pandemic, and prevent foreigners from suddenly withdrawing their money. The sovereign wealth fund, rather than debt, could have supported PNG’s businesses and individuals at this difficult time and revive the country’s growth after the crisis.
THE POTENTIAL IMPACT OF THE COVID-19 PANDEMIC ON THE EXCHANGE RATE IN PAPUA NEW GUINEA

By Francis Odhuno

Ever since the outbreak of the novel coronavirus (COVID-19) in Wuhan, China, was reported to the World Health Organization (WHO) on 31 December 2019, containing the spread of the virus has been every country’s nightmare. Data compiled by the European Centre for Disease Prevention and Control (2020) suggest that as of 31 March 2020, the virus had spread to nearly 200 countries and territories with about 800,000 infections and close to 40,000 deaths worldwide. [At the time of completing this paper on April 17 the infections had soared to over two million with over 120 thousand deaths.] Currently there is no vaccine or medicine to combat the infection.

There seems to be a general agreement that the COVID-19 pandemic, already declared a public health emergency, has provoked an unprecedented economic decline in nearly all countries. Although Papua New Guinea (PNG) had only one (1) incident of COVID-19 infection during the first quarter of 2020 (PNG Ministry of Health, 2020) [At the time of completing this paper on April 17 PNG had seven (7) confirmed COVID-19 infections, no deaths], the Government recognised at that time that the spread of the virus locally and globally will likely have profound implications for the country’s economic performance.

Given this fear, the Government declared a State of Emergency, closed the country’s borders and began to implement a number of economic policies aimed at forestalling any worsening of the country’s economic growth trend and improving the social welfare of citizens. For example, as a component of its Economic Stimulus Package in response to COVID-19, the Government is implementing key monetary and fiscal policies aimed at maintaining low and stable inflation, and to smooth fluctuations in the exchange rate (Bakani, 2020).

Given the magnitude of the current public health scare, managing the country’s exchange rate policy is particularly important because uncertainties and risks of expropriation of investments during a prolonged COVID-19 pandemic are high, and traders in PNG are more likely to prefer foreign exchange rates and the risk of capital flight become a serious policy concern. The exchange rate is therefore a priori the monetary policy instrument that the government can manipulate to stimulate economic activity. It will however be much more informative if future research can empirically investigate whether exchange rates fluctuate in response to COVID-19 infections and fatalities.

Potential impact of COVID-19 pandemic on the exchange rate

There are several mechanisms by which the COVID-19 pandemic could affect the value of PNG's currency, the Kina. COVID-19 mortality (those who die) and morbidity (those who are sick and unable to work for a period of time) can lead directly to a reduction in the number of workers available. These deaths can occur to workers in their most productive years. The younger and less experienced workers may replace the dead and immobilised experienced workers, but this will certainly lead to reductions in both worker productivity and exports from PNG. Hence, firms will be reluctant to hire the less experienced workers. As a result, the shortage of workers can lead to higher wages which, in turn, leads to higher domestic production costs. Higher domestic production costs result in a loss of international competitiveness which can cause foreign exchange shortages (Guerrieri et al., 2020).

Even if COVID-19 is currently contained with no deaths in PNG, the economic integration and interdependence with the rest of the world means that the PNG economy is still vulnerable to the ravages of the COVID-19 pandemic across the globe. The daily news of COVID-19 infection, transmission and mortality in dozens of countries leads to the obvious conclusion that the infection can happen anywhere. Observers in PNG will agree, based on international news coverage, that the COVID-19 global pandemic is currently the single largest public health problem of the 21st Century (PNG Ministry of Health, 2020). More so, because within three months of its outbreak, the infection and spread of this new coronavirus has not been contained in most of the developed world. Italy, Spain, the UK and the US, for example, have all seen exponential growths in reported cases of new infections and deaths from COVID-19 across their demographic spectra.
Given this, concerns have emerged about the extent to which COVID-19 is spreading across the developing world with inadequate health facilities and professionals to combat such a dramatic pandemic (Bright, 2020). If these worries are confirmed, the COVID-19 pandemic will remain far more than a serious public health problem in PNG. It is a macroeconomic problem, perhaps the single biggest macroeconomic problem likely to face the country ever. And it is becoming increasingly clear that COVID-19 epidemic is a major threat to the country’s long-term economic growth if no cure is found soon. The brief experience with the State of Emergency and the lockdown of each province suggests that these COVID-19 containment measures have mainly disrupted the operations of the country’s largest sector – the informal economy. Continuing to restrict the movement of peasants (smallholder farmers for example) over a prolonged period of the pandemic is likely to affect the country’s foreign exchange earning capacity of agriculture and fisheries sectors.

Policy response to the potential impact of COVID-19 pandemic on the exchange rate

The above theoretical propositions suggest that the exchange rate is an important macroeconomic fundamental or variable that has the potential to affect the economy at large. To help mitigate the impact of COVID-19 pandemic on the country’s macroeconomy, the Government of PNG through the Bank of Papua New Guinea (the country’s central bank) is implementing two key monetary policy measures that target stabilising the value of the country’s currency, the Kina (Bakani, 2020).

First, a review of the country’s foreign exchange regulations is in the works; the aim is to shorten the holding of export receipts offshore to no more than three months, and for the surpluses to be brought into the country immediately. The Government is also implementing stringent foreign exchange controls over currency trading by banks to prevent any overpricing of foreign currencies. Thus, the prosperity of PNG’s external sector is believed to depend largely on reducing uncertainty around the COVID-19 pandemic and maintaining a stable currency. It is therefore imperative to test, in the paragraphs below, whether the COVID-19 pandemic can be blamed for the fluctuations in the exchange rate – value of foreign currency per Kina – to better understand the implications of the Government’s policy response to the pandemic.

Exchange rate fluctuations during the first three months of COVID-19 pandemic

In the absence of a rigorous empirical analysis, it is possible to compare the trends in the day-to-day depreciation of the Kina against the US Dollar (USD) and the Australian Dollar (AUD); the two foreign currencies used in PNG and the day-to-day fluctuations in the number of COVID-19 cases or deaths during the pandemic. As Figure 1 suggests, the USD/PGK exchange rate appear to have been relatively stable during the first three months of COVID-19 pandemic. The exceptions are two occasions when the Kina depreciated vis-à-vis the USD dollar; first on 4 March by 0.148 percent, and then on 20 March by 0.074 percent. On these dates the number of COVID-19 infections was reported to have increased by 805 and 10,900 cases respectively.

Nevertheless, the patterns of the two data series in Figure 1 suggest that the seemingly increasing number of COVID-19 infection cases is unlikely to disturb the US Dollar value of PNG Kina (details later). However, as Figure 2 suggests, it would be naïve, given the might of the US Dollar in the global scene, to conclude from this picture that PNG’s economy, particularly the money market, will be largely unscathed by the COVID-19 pandemic. Figure 2 compares the trends in daily fluctuations in Australian Dollar price of Kina and incidents of worldwide COVID-19 infection cases during the first quarter of 2020. The Figure shows how PNG is digesting the news about the COVID-19 pandemic – the
SPOTLIGHT

AUD/PGK exchange rate fluctuations performs well in the sense of mirroring the time-series behaviour of the worldwide COVID-19 infections data.

Can COVID-19 be blamed for exchange rate fluctuations?

The potential impact of the current COVID-19 pandemic on the exchange rate in PNG is difficult to assess, more so because the country has been experiencing the shortage of US dollars since 2016 (Odhuno, et. al. 2016). Because the situation has not improved much, and the demand for US dollar remains high, the occasional depreciation of Kina vis-à-vis the US dollar in recent months can be attributed to the shortage of this “commodity” in the PNG foreign exchange market. In general, the apparent non-response of the USD/PGK exchange rate to COVID-19 shocks suggest that the US-China trade deal (signed on 15 January 2020) may have calmed trade frictions, so the market was hoping for a quick rebound during most of the first quarter of 2020. But the contribution of COVID-19 on the relative stability of USD/PGK exchange rate may also be justified by the policy that the country invoked in response to the pandemic. Specifically, the BPNG has tightened the country’s financial condition by limiting the use (i.e. demand for) of the US dollar by directing foreign exchange dealers to give priority to importers of goods (e.g. medicines, face masks, sanitisers) and services deemed essential for wading off the COVID-19 from PNG (Bakani, 2020). It may be the case therefore that the US dollar is in excess supply as the demand is restricted due to the uncertainty about the impact of COVID-19 and hence the price is relatively stable.

The above graphical analysis also shows that the announcement of the first COVID-19 infection case in PNG does not appear to have been a possible trend break for the country’s exchange rate fluctuations. Even then, the above figures indicate near synchrony, suggesting that the COVID-19 pandemic could be making a sizable contribution to the AUD/PGK exchange rate volatility, especially leading to large spikes in fluctuations during the later days of March 2020. It is, however, a puzzle why the AUD/PGK exchange rate appreciates following “bad news” about the pandemic; that is, an increase in the number of COVID-19 infection cases. Similarly, it is not entirely clear why PGK depreciates vis-à-vis the AUD when fewer new cases of COVID-19 infection are reported; that is, “good news”. It is probable that the appreciation of AUD/PGK exchange rate could be because of the weakening of the AUD against the USD, which may be attributed to the decrease in commodity prices. However, as Posen (2020) has argued, there is no good reason for significant swings in bilateral exchange rates since all major economies are being affected by the pandemic simultaneously, with limited room for early recovery to expand exports.

It is not hard to predict how COVID-19 will affect output for export

Still, it is not hard to speculate how potential labour shortages occasioned by COVID-19 pandemic will affect output for PNG exports. Some expatriate workforce had no confidence in the country’s health system to cope with a widespread COVID-19 pandemic, so they hurriedly left the country before the lockdown. Some more expatriates were later evacuated under special chartered flights back to their countries when there were no passenger flights operating in and out of PNG. Probably the majority of expatriates who left in fear of COVID-19 outbreak in the country are technicians and professionals in the largest export-oriented occupational categories with skills shortage in PNG, like forestry and logging, construction services, and oil and gas extraction (Voigt-Graf, 2016). Because the threat of COVID-19 pandemic is still real in PNG, the reduced workforce in these sectors means that the current COVID-19 will likely hit the country’s foreign exchange inflows as output for these sectors are reduced. The situation of COVID-19 pandemic in trading partner countries may also necessitate cancelling
or deferring their imports from PNG, while the continued health scare may continue to deter both tourists and investors from PNG. So, the value of the Kina vis-à-vis other foreign currencies, with the exception of the US dollar, is likely to see some volatility largely due to uncertainty related to the impact of COVID-19 both at home and abroad.

**How can PNG stabilise the value of the Kina?**

How then, can PNG stabilise the value of the country’s currency amid bad news about the COVID-19 pandemic? History suggests that major disease outbreaks often have adverse impacts on asset prices, including exchange rates (Jorda et al., 2020). And countries like PNG are often vulnerable because, apart from export earnings and foreign aid, the country’s foreign debt is also held in US dollars. The US dollar cost of capital is likely to rise if global financial markets are severely disrupted by COVID-19. But since PNG’s contribution to the world market is small, it cannot influence international prices of global currencies; so policy options that can help mitigate exchange rate fluctuations are limited.

A revaluation of the PGK vis-à-vis AUD, in an attempt to simultaneously increase PNG exports to and reduce trade deficit with Australia, for example, will not work. Instead, it is the behaviour of AUD vis-à-vis the USD, which is currently the strongest currency in the world, that is likely to be the main determinant of the AUD price of PGK. Revaluation of the Kina is also not a viable option as it may trigger a crisis in the country’s banking sector – writing down US dollar losses might be a painful adjustment for the country’s small banking sector and the economy.

So, in addition to strict foreign exchange controls over currency (mainly the US dollar) trading by banks, the Government needs to reconsider the management of benefits from mineral and petroleum exports by a sovereign wealth fund, and to build its foreign exchange reserves. Since there is complete uncertainty on what will happen during and beyond COVID-19 pandemic, the country’s sovereign wealth fund (rather than loans) should provide funding for the Economic Stimulus Package to support companies, especially micro, small and medium enterprises, and protect people’s livelihoods and jobs. Adequate foreign exchange reserve holdings should help support market confidence during the pandemic, and prevent foreigners from suddenly withdrawing their money.

**Conclusion**

COVID-19 continues to spread at alarming rates across many countries of the world. It would seem that countries are instituting nearly similar health measures to slow this spread, and economic policies to mitigate potential adverse consequences of the pandemic in each country. As a component of its Economic Stimulus Package in response to COVID-19 the Government of PNG is implementing key monetary and fiscal policies aimed at maintaining low and stable inflation, and to smooth fluctuations in the exchange rate.

The above cursory review of the potential impact of COVID-19 on the exchange rate in PNG is mixed, at best. It suggests that the price of the US dollar remained relatively stable during the first three months of COVID-19 pandemic. But the price of the Australian dollar was a bit more turbulent towards the end of the first quarter of 2020 – this turbulence coincided with increased uncertainty about the pandemic in that countries reporting increases in COVID-19 infections were more likely to report reductions in new infection cases the following day. However, given the large number of factors that potentially impact on exchange rates, the effect of COVID-19 might not be visible in the above graphical analysis; the monetary policy options that can help mitigate exchange rate fluctuations in PNG are also limited.

Perhaps as an extension, the next phase of the study should implicitly incorporate the indicators of the extent (cases) and severity (deaths) of COVID-19 in empirical exchange rate models to investigate whether exchange rates fluctuate in response to COVID-19 infections and fatalities. This will provide the much-needed evidence to support the broad hypothesis that the spread of COVID-19, not only in PNG but also elsewhere, is much a macroeconomic problem as it is a public health problem.

**References**


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