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KINGDOM OF THE NETHERLANDS—CURAÇAO AND SINT MAARTEN

SELECTED ISSUES

August 2021

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July 15, 2021

SELECTED ISSUES

Approved By
Western Hemisphere
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CURAÇÃO AND SINT MAARTEN MONETARY UNION: CONSIDERATIONS ON DOLLARIZATION

Since the dissolution of the Netherlands Antilles in 2010, there has been recurrent interest in the topic of the exchange arrangement in Curaçao and Sint Maarten. More recently, the authorities have been weighing benefits and costs of dollarization versus maintaining the common currency. This note aims to lay out relevant information and issues for the authorities' discussion. It provides considerations from the literature, examines institutional arrangements in dollarized economies and discusses some issues specific to Curaçao and Sint Maarten. Regardless of the direction of the discussion, it would be important to have a good supporting policy and institutional framework in place necessary for a successful operation of any exchange rate regime. Special attention needs to be paid to small-island constraints.

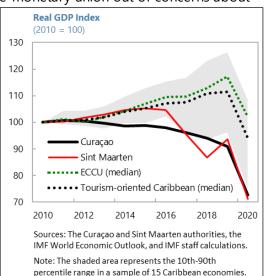
A. Context

1. After the dissolution of the Netherlands Antilles in 2010, Curaçao and Sint Maarten became autonomous countries within the Kingdom of Netherlands and formed a monetary union (CSMU).¹ The Bank of Netherlands Antilles situated in Curaçao became the Central Bank van Curaçao en Sint Maarten (CBCS), pursuing the objectives of (i) promoting the stability of the currency; (ii) promoting the health of the financial system; and (ii) promoting safe and efficient payment traffic (CBCS Charter 2010). So far, the CSMU has retained the Netherlands Antillean guilder as its currency and preserved the long-standing peg to the US dollar.² Over the years, there have been discussions about various alternative options. In 2013, the Social Economic Council of Sint Maarten advised the government to step out of the monetary union out of concerns about

possible devaluation due to current account imbalances in Curação. More recently, a study on the costs and benefits of dollarizing vs. continuing with the current exchange rate regime has been included in the reform country package (landspakket) agreed with the Netherlands.

(landspakket) agreed with the Netherlands.

2. The union has been facing significant external shocks and structural rigidities, resulting in disappointing growth/employment outcomes. Spillovers from the deep crisis in Venezuela affected Curaçao, contributing to a recession and the widening of the current account deficit, while Sint Maarten's economy was



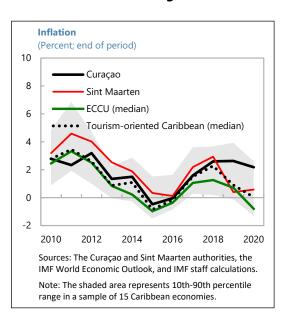
¹ The three remaining islands of the Netherlands Antilles—Bonaire, Saba, and Sint Eustatius—became special municipalities of the Netherlands and adopted the U.S. dollar in January 2011.

² The peg has been preserved at 1.79 Netherlands Antillean guilder per dollar since 1971.

devastated by hurricanes in 2017. Both countries were hit very hard by the 2020-21 pandemic. In both countries, real GDP in 2020 is estimated to be lower than in 2010. The current account deficit (CAD) has been persistently high in Curaçao, averaging nearly 22 percent of GDP in 2010-20, with large deficits in the goods account more than offsetting the surplus in the services account. In Sint Maarten, the CAD averaged about 3 percent of GDP during the same period. Since 2010, the unemployment rate in Sint Maarten has been trending slightly downwards while it is higher and has been trending upwards in Curaçao. The youth unemployment is particularly high in Curaçao, where it amounted to almost 30 percent in 2018, while Sint Maarten recorded a rate of almost 18 percent. These trends in growth and unemployment have arisen not only due to external shocks, but also structural challenges such as red tape, antiquated regulations, infrastructure bottlenecks and labor market rigidities and skills mismatches.

3. At the same time, the CSMU has continued to deliver a stable exchange rate and low

inflation. There have been no major exchange rate pressures and inflation rates in both countries have been relatively low and highly correlated. The inflation differential between the two economies has been within 1.5 percentage points in all years except 2011 and 2019-20, thus largely achieving inflation convergence, one of the key requirements for monetary union stability. Inflation closely followed averages for the tourism-oriented Caribbean and the Eastern Caribbean Currency Union (ECCU). In 2010-20, the international reserves averaged 4.6 months of imports of goods and services and exceeded 3 months of imports in any given year, although they were below the reserve adequacy (ARA) metric (IMF, 2011).



4. This paper lays out issues that the authorities could consider in their discussion whether to pursue official dollarization or maintain the current arrangement. It is important to note that the choice of the exchange rate arrangement is the prerogative of the authorities and the purpose of this paper is to inform their discussion on this issue rather than provide policy advice. Section B reviews the economic structure of the monetary union of Curação and Sint Maarten. Section C discusses general benefits and costs of official dollarization. Section D compiles information about institutional arrangements in other dollarized economies. Section E discusses

³ The IMF Articles of Agreement allow an IMF member country to adopt an exchange arrangement of its choice within the parameters set forth in Article IV, Section 2. However, each member has to comply with the obligations on the conduct of its exchange rate and other economic and financial policies set forth in Article IV, Section 1. The responsibility for compliance with the obligations under the Articles is with The Kingdom of the Netherlands as a Fund member.

issues that the authorities of Curação and Sint Maarten could consider in their discussion on the exchange rate arrangement.

B. Economic Structure of the Monetary Union of Curação and Sint Maarten

- 5. Despite both Curaçao and Sint Maarten being oriented towards tourism, they also face conditions that make them vulnerable to asymmetric shocks. The small size of their economies poses significant challenges for diversification and make them vulnerable to shocks and therefore macroeconomic volatility. Both countries are tourism-oriented, suggesting that their external shocks should be correlated. However, they are geographically far apart and face different risks. Curaçao's closeness to Venezuela, both in terms of geography and economic linkages, made it vulnerable to spillovers from the protracted Venezuelan crisis. Sint Maarten's location in the hurricane belt increases the likelihood of periodic hurricanes, as demonstrated by catastrophic damages from the 2017 hurricanes. In addition, there are significant differences in economic structure related to the weight of the tourism sector, the origin of tourists and in international economic linkages. Whereas Sint Maarten is predominantly tourism-oriented and mostly tied to the U.S. in terms of its international economic linkages, Curaçao is more diversified in terms of both its economic structure and linkages. This makes Curaçao and Sint Maarten vulnerable to differential shocks in addition to the common global shocks such as the 2020-21 pandemic.
- 6. Despite being in a currency union, the degree of economic integration between Curação and Sint Maarten is limited.
- There is no customs union and trade in goods and services is limited. Sint Maarten is a free trade area and does not apply external tariffs, while Curaçao's external trade regime does not differentiate Sint Maarten from any other country. The data on trade between Curaçao and Sint Maarten are not compiled, but trade is likely to be marginal.
- Labor mobility between the two countries is unrestricted given the CSMU's status as part of the Kingdom of the Netherlands. Given the common (Dutch) citizenship of people in both countries, labor movement is free, which in principle helps with adjusting to shocks in line with the optimal currency area literature (Mundell, 1961). At the same time, it is relatively easy for people to migrate to The Netherlands. This implies that in the event of a shock on one CSMU member, people can choose to relocate to The Netherlands rather than to the other member. This "third country" mobility plays an important role in the functioning of the union, including placing a constraint on wage flexibility (as lower wages in the CSMU could induce mobility of the educated workforce to the Netherlands). In practice, labor mobility appears to be hampered by overall rigidities in the formal labor markets.
- Capital mobility is also free within the CSMU, which potentially could help with risk-sharing and dissipation of shocks when the financial markets deepen. There are no restrictions on capital mobility within the CSMU, and factors such as an integrated payment system and the banking union are positive factors for capital mobility. In practice, the financial markets in the CSMU are fragmented and underdeveloped (e.g. the interbank liquidity market

practically does not exist) and the financial linkages between Curação and Sint Maarten are limited to intercompany relationships within financial institutions with presence in both countries, although the data to assess the extent of these linkages are not available.

- 7. Policy coordination—an essential part of any monetary union—is provided by the fiscal arrangement with the Kingdom of the Netherlands and the banking union.
- The CSMU is not a fiscal union as there is no fiscal risk-sharing, but the fiscal policy is de facto coordinated via the common fiscal arrangement within the Kingdom of the **Netherlands.** The framework features the "golden" fiscal rule (stipulating that current expenditure must be equal or lower than current revenue in any given year), a cap of interest payments to 5 percent of fiscal revenues (averaged over three years) and a system of fiscal supervision conducted by the fiscal supervision board College Financieel Toezicht (Cft). Deviations are allowed only for major shocks and require approval by the Kingdom Council of Ministers.⁴ In the course of a regular business cycle, current fiscal deficits are required to be compensated with equivalent surpluses the following year. Borrowing is permitted only for capital expenditures except during significant shocks justifying deviations from the fiscal rule. The standing subscription arrangement provides access on the terms set at the Dutch capital markets and therefore does not include a risk premium. Borrowing from other sources is permitted only at equivalent or better terms relative to the standing subscription. This system of fiscal supervision aims at preventing fiscal imbalances and has a strong advisory role in the formulation of budgets, the issuance of loans and on fiscal policies, although there have been deviations from the rule in both countries.
- The CSMU has made progress towards developing a banking union, although there are significant gaps relative to best-practice frameworks. The CBCS is a single supervisory authority for banks and non-bank financial institutions with powers to provide liquidity assistance. There is an integrated payments system providing clearing and settlement services to both countries in both local currency and the U.S. dollar. The standing subscription arrangement de facto prevents the development of the local securities market and poses significant hurdles for monetary policy. There are gaps in the crisis management and financial safety net frameworks (e.g. blurred lines between monetary policy operations and the emergency liquidity framework, an outdated bank resolution framework, and the absence of a deposit insurance system). Whereas the CBCS is the designated macroprudential authority, the macroprudential policy framework is still in the very early stages of development. The CBCS has developed a financial sector reform program to address the gaps.

⁴ Approvals for deviating from the golden rule were granted to Sint Maarten after the hurricane and to both Curaçao and Sint Maarten during the pandemic.

⁵ The CBCS has several macroprudential instruments such as credit caps (currently not active), loan-to-value ratio, liquidity requirements, a limit on loans-to-deposit ratio, and a requirement for banks to maintain a positive net open foreign exchange position. However, the overall macroprudential policy framework is not fleshed out. There is no countercyclical capital buffer. The CBCS is planning to launch the Financial Stability Report in 2021.

8. There is a significant degree of *de facto* dollarization in Sint Maarten. The U.S. dollar has been circulating freely in both countries. In Sint Maarten, financial dollarization stood at 58 percent on the deposit side and 66 percent on the credit side in 2020. In contrast, the degree of dollarization in Curaçao is much smaller, at about 12 percent on the deposit side and 9 percent on the credit side in the same year. Dollarization weakens the transmission channel for union-wide monetary policy and creates vulnerabilities to balance sheet effects in case of exchange rate adjustments. Despite the requirement for banks to maintain a positive net open FX position, Sint Maarten could be subject to currency mismatch risks as it is not clear what proportion of borrowers taking loans in foreign exchange have income denominated in foreign exchange.

C. Benefits and Costs of Official Dollarization: Literature Review

9. Benefits and costs of official dollarization are well articulated in the literature⁶. The most commonly cited advantages revolve around the following themes: (i) rejecting the possibility of inflationary finance of the public sector by the central bank leads to credible inflation stabilization and incentivizes fiscal discipline and stronger fiscal policies; (ii) the elimination of the currency risk reduces the country risk premium and interest rates, (iii) lower transaction costs and policy credibility promote deeper integration into the world economy, and (iv) higher investor confidence promotes investment and growth. Commonly cited disadvantages are (i) the loss of independent monetary and exchange rate policies, (ii) very limited power to provide liquidity during financial crises, and (iii) loss of seigniorage. It should be noted that the additional benefits and costs of dollarization depend on the existing exchange rate regime and need to be nuanced based on country-specific circumstances. Reaching the full benefits while minimizing the disadvantages requires a set of supporting policies, underscoring the idea that any exchange rate regime requires a good overall policy framework. Given a relatively small sample of dollarized economies, there are not many studies looking into the empirical outcomes. The discussion below elaborates on these arguments, which are mostly against a counterfactual of a floating exchange rate regime.

Benefits

• Price stabilization and better fiscal discipline. There is broad consensus in the literature that dollarization leads to price stabilization. Quispe-Agnoli (2002) examines the dollarization episodes of Panama, El Salvador, and Ecuador and finds that inflation is lowered or remained low after dollarization. This is in line with the broader study undertaken by Edwards and Magenzdo (2001). Goldfajn and Olivares (2000) find that inflation rates tend to converge to the U.S. rate when the currency of dollarization is the U.S. dollar, but Berg and Borensztein (2000) caution that some volatility can still be experienced as the U.S. dollar fluctuates against other currencies. At the same time, views on whether dollarization leads to fiscal discipline differ. Edwards (2001) finds that dollarized economies do not exhibit higher fiscal discipline than non-dollarized economies and Goldfajn and Olivares (2000) find no significant increase in fiscal discipline from dollarization in Panama.

⁶ See Berg and Borensztein (2000), Bogetic (2000), Duncan (2003).

- Elimination of the currency risk and lower interest rates. Kokenyne et al. (2010) note that lending in foreign currency may have a positive impact on domestic consumption and investment, and thus economic growth, through a reduction in the cost of credit. Calvo (1999), Berg and Borensztein (2000), and Dornbusch (2000) all find that interest rates decline in response to dollarization. However, Goldfajn and Olivares (2000) note--using the case of Panama--that it is not clear whether lower interest rates are due to dollarization or strong integration into the global financial system. Many studies stress that dollarization does not imply full convergence to world interest rates as the reduction of currency risk does not eliminate the sovereign default risk (Eichengreen, 2002).
- **Deeper integration in the world economy.** Dollarization eliminates the need for hedging against the currency risk and lowers transactions costs, therefore reducing overall trade costs and promoting trade. Kokenyne et al. (2010) argue that dollarization may mitigate exchange rate risk for foreign investors, increasing their confidence, thus boosting investments, and can facilitate portfolio diversification of residents. In addition, the elimination of currency mismatches in the banking system promotes its integration into the global economy. Morandé and Schmidt-Hebbel (2000) and Panizza and others (2000) find results consistent with higher trade integration while Berg and Borensztein (2000) report that dollarization contributes to economic integration in both trade and prices with the country whose currency is adopted.
- **Stronger economic growth**. Many studies argue that dollarization tends to lead to higher growth rates through the investment channel, largely due to increased investor confidence in the low exchange rate risk as found by Berg and Borensztein (2000). Mendoza (2002) finds that the lack of independent monetary policy reduces information costs and increases investor confidence. However, there are studies presenting an alternative view. Edwards (2001) and Edwards and Magendzo (2001) find that dollarized economies have lower growth while Goldfajn and Olivares (2000) find that without the monetary policy and exchange rate buffers, growth is more volatile.

Costs

- Loss of monetary and exchange rate polices. A dollarizing economy gives up its independent monetary and exchange rate policies in favor of the monetary policy of the country issuing the target currency (Berg and Borensztein, 2000). Thus, it can no longer use the exchange rate or money supply as a shock absorber (Rojas-Suárez,1999). Countries with exchange rate pegs are losing their ability to reset the peg to improve competitiveness, leaving the burden of real adjustment to prices and wages, which could lead to protracted recessions. On the other hand, Calvo (1999) argues that devaluations could be very disruptive to the economy, depending on the currency composition of the liabilities of banks, and that real exchange misalignments could be fixed by commercial policy (trade reform).
- **Limited lender of last resort (LOLR).** In a financial crisis, the central bank usually functions as the lender of last resort to inject liquidity to banks. An economy which cannot issue its own currency has a rather limited ability to help financial institutions during a crisis. Calvo (1999)

argues that central banks can still provide liquidity by playing the coordination role, or banks can acquire liquidity through international channels. Berg and Borensztein (2000) suggest the central bank can build a reserve fund or a line of credit with international lenders to deal with non-systemic short-term liquidity issues. They add that the significance of the loss of LOLR function should not be exaggerated as the central banks' ability to deal with crises by creating money is typically limited.

- **Loss of seigniorage.** A dollarized economy is not able to collect seigniorage, which implies a loss of revenue to the government. The loss of seigniorage can be offset by lower borrowing costs as mentioned by Dornbusch (2000).
- **10.** The literature has also debated the important issue of the optimal timing of dollarization vis-à-vis the supporting reforms. To get full benefits and minimize the risks of dollarization, it needs to be supported by strong complementary policies (Eichengreen, 2002). Fiscal policies must be made consistent with the much harder budget constraint. The financial system needs to be strengthened to reduce the risks of crises in the absence of a lender of last resort. The labor market needs to be made more flexible to allow adjustment to shocks. The economy must be restructured to minimize differentials in cyclical fluctuations with the target currency area. Whereas one point of view is that dollarization incentivizes these reforms, the evidence is less clear. Eichengreen (2002) points out that whereas dollarization delivers quick gains in monetary credibility and price stabilization, it does not automatically enhance the credibility of other policies. It does not automatically create consensus on much-needed reforms. Without complementary reforms, it could be a high-risk strategy. Jacome and Lonnberg (2010) emphasize that if full implementation of the complementary reforms before dollarization is not feasible, they need to be implemented as quickly as possible to minimize risks.

D. Institutional Arrangements in Dollarized Economies

- **11.** There are 16 officially dollarized independent economies (Tables 1 and 2), the majority of which are microstates. Six of them use the U.S. dollar, five use the Euro⁷, four adopted the Australian dollar and one uses the Swiss franc. Only six officially dollarized economies (38 percent of the set) have a central bank. Ten dollarized economies are microstates, defined for the purposes of this paper as independent states with population of up to 250 thousand. Only one of them (San Marino) has a central bank.
- 12. All dollarized states have arrangements for supervision of the financial sector (summarized in Table 2).
- **Prudential supervision of banks and non-bank financial institutions.** With the exception of Nauru, all dollarized economies have arrangements for prudential supervision of banks. Most of

⁷ These five states are not members of the EU and the Euro Area.

⁸ There is no uniformly accepted definition of a microstate. The threshold of 250 thousand is chosen to make the sample broadly comparable to the size of the monetary union of Curação and Sint Maarten.

them also have arrangements for supervising non-bank financial institutions. Out of six dollarized economies with central banks, four of them (Kosovo, Montenegro, San Marino, Timor-Leste) place prudential supervision with their central banks. Five dollarized economies (Andorra, Liechtenstein, Ecuador, El Salvador, and Panama) set up local regulatory authorities for supervising banks and non-bank financial institutions. Several dollarized microstates in the Pacific have created supervisory commissions, but also rely on supervision of foreign banks by the home regulators of their parent banks (e.g. U.S. banks operating in Micronesia, Marshall Islands and Palau are supervised directly by the FDIC). In Monaco, banks are under the supervision of the French Commission Bancaire. It should be noted that the regulatory structures in many small microstates are being developed and have a lot of room for improvement. In addition to prudential supervision, all states have arrangements for financial integrity supervision—at the minimum, they have financial intelligence/financial transactions units.

 Macroprudential surveillance and policies. In dollarized economies with central banks, macroprudential supervision and policies are implemented by central banks, although in some instances (San Marino), the development of this function is in progress. In many dollarized economies, this function is not well-developed.

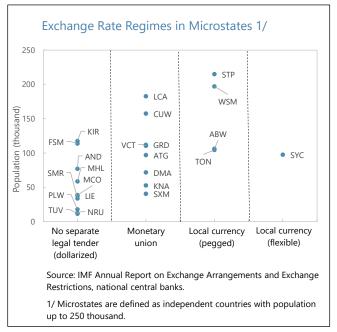
Table 1. Officially Dollarized Economies							
Country	Currency	Central bank					
1 Ecuador	U.S. dollar	Banco Central del Ecuador					
2 El Salvador	U.S. dollar	The Central Reserve Bank of El Salvador					
3 Panama	U.S. dollar, own balboa coins	None					
4 Kosovo 1/	Euro	The Central Bank of the Republic of Kosovo					
5 Timor Leste	U.S. dollar	Banco Central de Timor Leste					
6 Montenegro 1/	Euro	The Central Bank of Montenegro					
7 Kiribati	Australian dollar, own coins	None					
8 Micronesia	U.S. dollar	None					
9 Andorra 1/	Euro, own coins	None					
10 Marshall Islands	U.S. dollar	None					
11 Monaco 1/	Euro	None					
12 Liechtenstein	Swiss franc	None					
13 San Marino	Euro, own coins	The Central Bank of San Marino					
14 Palau	U.S. dollar	None					
15 Nauru	Australian dollar	None					
16 Tuvalu	Australian dollar, own coins	None					
Sources: AREAER and World Do 1/ Not a member of the Europ	evelopment Indicators.	None					

	Region	Country	Supervisory authority for resident banks	Supervisory authority for non-bank financial services/offshore banks	Macroprudential supervision framework	Financial integrity (AML/CFT) supervision
1	Europe	Andorra	Andorran Financial Authority (AFA)	AFA	AFA	Unitat d'Intelligència Financera d'Andorra (UIFAND)
2	Europe	Kosovo	The Central Bank of the Republic of Kosovo (CBK)	СВК	СВК	CBK and Financial Intelligence Unit
3	Europe	Liechtenstein	Financial Market Authority (FMA)	FMA	The Financial Stability Council	FMA
4	Europe	Monaco	Commission Bancaire (France)	Commission de Contrôle des Activités Financières (Monaco);	N/A	Service d'Information et de Contrôle sur les Circuits Financiers (Monaco)
5	Europe	Montenegro	The Central Bank of Montenegro (CBCG)	The CBCG	The CBCG	The Administration for the Prevention of Money Launderin and Terrorist Financing (APMLTI
6	Europe	San Marino	The Central Bank of San Marino (CBSM)	The CBSM	The CBSM (in progress)	Financial Information Agency
7	Latin America	Ecuador	Superintendency of Banks and Insurance Companies	Superintendency of Banks and Insurance Companies	Banco Central del Ecuador / Monetary and Financial Policy and Regulation Board	The Financial Analysis Unit
8	Latin America	El Salvador	Financial System Superintendency	Financial System Superintendency	The Central Reserve Bank of El Salvador (BCR)	Financial Intelligence Unit
9	Latin America	Panama	The Superintendency of Banks of Panama (SBP)	SBP, National Securities Commission (CNV), Superintendency of Insurance and Reinsurance (SSRP), Panamanian Autonomous Institute for Cooperatives (IPACOOP), and Banco Hipotecario Nacional (BHN)	SBP	Financial Intelligence Unit
0	Pacific	Federated States of Micronesia (FSM)	FSM Banking Board. FDIC supervises Bank of Guam and Bank of FSM in Micronesia.	FSM Insurance Board	None	Financial Intelligence Unit
11	Pacific	Kiribati	The Ministry of Finance and Econ Development	None	None	Financial Intelligence Unit under the Kiribati Police
2	Pacific	Marshall Islands	The Banking Commission. The FDIC supervises Bank of Guam	None	None	Financial Intelligence Unit
3	Pacific	Nauru	None	None	None	Financial Intelligence Unit
4	Pacific	Palau	Financial Institutions Commission. FDIC supervises the US banks.	None	None	Financial Intelligence Unit, Financial Crimes Investigation Unit
15	Pacific	Timor Leste	Banco Central de Timor Leste (BCTL)	BCTL	The BCTL is responsible for financial stability, although no specific mandate for	Financial Intelligence Unit
16	Pacific	Tuvalu	The Banking Commission (in progress).	None	None	Transaction Tracking Unit

13. It could be useful to consider the current setup in the islands of Bonaire, Sint Eustatius, and Saba (BES), which are municipalities of the Kingdom of the Netherlands. The Dutch National Bank (DNB) is the supervisory authority. In practice, banking in the BES islands is done primarily via branches of Curaçao-based banks and the CBCS acts as their home supervisor. By law, the financial integrity supervision in the BES islands is the responsibility of the DNB, which supervises credit institutions, insurance companies, money service businesses, casinos and trust and company service providers. The conduct of supervision is the responsibility of The Dutch Authority for the Financial Markets (AFM). The DNB conducts regular on-site visits of banks on the BES islands. The financial system in the BES islands is separate from the Dutch system and banks use correspondent banking relationships for international financial transactions. A deposit guarantee system in the BES islands was introduced by law in 2017.

14. It is useful to place the dollarized microstates in the context of a broader set of all

independent microstates to look at the incidence of alternative exchange rate **regimes.** The overwhelming majority of the 23 microstates are either dollarized (10) or belong to a currency union (8). Only 5 of them have local currencies, and they are found in the larger microstates with population of close to 100 thousand or more. This is most likely a reflection of the fact that maintaining an independent currency and independent central bank requires resources, including qualified personnel, that are not readily available in the smallest microstates and the common solutions are either dollarization or pooling resources in the context of a monetary union.



E. Curação and Sint Maarten: Considerations on Dollarization

15. A hypothetical dollarization would be a major structural change that should not be taken lightly. It would entail significant transitional costs even during non-crisis periods and these costs would be much higher during the current pandemic. Moreover, in order to take advantage of the benefits while minimizing the costs, a hypothetical dollarization would require careful planning and putting in place key supporting reforms as discussed below. Dollarizing without supporting reforms would be a very risky strategy. In addition, the cost-benefit considerations discussed in section C would be more nuanced in the case of a long-standing peg such as the CSMU: both Curaçao and Sint Maarten already benefit from low and stable inflation, public sector financing is done through a special arrangement as opposed to the market, and room for independent monetary policy is already limited.

- 16. The monetary union aspect and small-island constraints add additional layers of complexity. A dollarization by one or both members of the monetary union would effectively imply its dissolution and require an agreement on the new objectives/mandate for the CBCS—which should be underpinned by a new CBCS's Statute—or alternative arrangements for a number of essential functions as described below. It would also require agreements on the division of the CBCS's assets between the two governments—this could be especially complex if only one country decided to dollarize. The small-island constraints—especially in Sint Maarten—could pose challenges for the continuity of essential institutional functions currently fulfilled by the CBCS.
- The authorities would need to choose a target currency and a conversion rate that 17. would need to be credible and in line with external sustainability. The two plausible options would be the US dollar and the Euro. A choice could be made on the basis of minimizing the volatility of the real effective exchange rate by giving preference to the currency of the largest trading partner. In Sint Maarten, the dominant trade and overall economic ties with the United States suggest that the U.S. dollar would be more natural choice than the Euro, although it should be noted that Saint Martin—located on the other side of the island—uses the Euro as its official currency. In Curação, the choice would be more nuanced as the Euro Area has a large weight among Curação's tourism markets, even though most international transactions are conducted in US dollars. The conversion rate would also need to be credible, so that the existing international reserves of the CBCS would cover its liabilities denominated in local currency (i.e. the monetary base). It would be also important to set the conversion rate at the equilibrium level to avoid the need for painful and protracted adjustment through nominal prices and wages. If dollarization were to lock in an uncompetitive exchange rate—or were to lead to a gradual loss of competitiveness due to choosing the wrong currency area—it would eventually trigger the need for a protracted painful adjustment.
- 18. In the case of a hypothetical dollarization, the authorities would need to maintain continuity of several critical functions currently carried out by the CBCS. These include (i) supervision of the financial sector entities (banks and non-bank institutions), including in the financial integrity (AML/CFT) area, (ii) macroprudential supervision and policies, (iii) an adequate resolution regime for financial institutions, (iv) maintaining the payment system, (v) fiscal agent function for the government, and (vi) providing analytical support for the governments. Whereas the CBCS could presumably continue to provide these functions in Curaçao, it is not clear how this would be done in Sint Maarten if the dissolution of the monetary union were to trigger a dissolution of the banking union. Setting up these functions locally in Sint Maarten would be very challenging due to capacity constraints. It would be critical to ensure continuity of supervision of Sint Maarten financial institutions.
- 19. A dollarized regime would place a special premium on the quality of micro- and macro supervision and the crisis resolution framework due to the limitations of the lender of last resort in the dollarized setting. Weaknesses in supervision and macroprudential risk monitoring could lead to accumulation of risks and eventually financial sector instability due to the loss of the lender of last resort function. Thus, it would be important to improve these functions before a hypothetical dollarization to minimize the risks.

- **20.** It is important to note that even a strong financial sector supervision would not be able to completely eliminate the need for a lender of last resort. Securing contingency credit lines could be an option, but in times of crisis, the first best solution would be to have large reserves. If the central bank were replaced by alternative arrangements, the reserves could be held in the form of government deposits. However, building an adequate stock of deposits does not appear feasible in the near to medium term given the difficult fiscal position in both countries. Moreover, it is unlikely that either central bank reserves or government deposits would be sufficient for addressing system-wide pressures. Given the limited lender of last resort function, the emergency liquidity arrangement (ELA) framework would need to be very strict and banks would need to hold significantly more *ex ante* liquidity buffers than in other regimes, which could have implications for their profitability.
- 21. The authorities would also need to resolve a number of operational issues such as arrangements to assure an adequate supply of currency (Jacome and Lonnberg, 2010). For example, the supply of U.S. dollar currency on the island of Bonaire is the responsibility of the DNB and banks on Saba and St. Eustatius are supplied by their head offices. It should be noted that whereas dollarization entails the administrative costs of supplying a foreign currency, it saves on the costs of production and management of a separate national currency.
- 22. Dollarization would also need to be considered in conjunction with the future of the current fiscal arrangement. In Curaçao and Sint Maarten, the fiscal arrangement provides access to loans at below-market interest rates subject to the fiscal supervision. If this arrangement were to remain unchanged, dollarization by itself would not strengthen incentives for improving the institutions and policies and would not necessarily improve fiscal discipline. At the same time, the exceptionally high vulnerability of both countries to external shocks, as demonstrated by the 2017 hurricanes in Sint Maarten and the 2020 pandemic, suggests that both countries would still require access to external financing during abnormal negative shocks. Whereas the reform of the fiscal arrangement is beyond the scope of this paper, its future setup needs to be considered as one of the key factors in the authorities' decision.
- 23. Given that dollarization by itself would not address the long-standing structural economic problems, the authorities would need to implement a number of supporting policies to get the full benefit of dollarization (Jacome and Lonnberg, 2010).
- Strong financial sector reform would be needed to minimize the risk of banking/financial sector crises due to the absence of the lender of last resort function. The pockets of vulnerability would need to be addressed and the prudential/supervisory functions strengthened. The authorities would have to introduce higher capital/liquidity requirements. Other elements of the financial safety net would have to be put in place such as a special resolution regime for banks and a deposit guarantee scheme.
- Labor market reform—and broader structural reforms—would also be needed to enable adjustments via the wage channel. External adverse shocks might require downward adjustments in nominal wages and prices, which are politically very difficult.

- Public financial management and strengthening the overall fiscal policy is needed regardless of the chosen exchange rate regime. These reforms would be especially important if the fiscal arrangement were to be modified.
- 24. It should be noted that the needed structural supporting reforms constitute a priority regardless of the exchange rate regime. In the near term, available current capacity should be allocated to priority reforms improving the Union's public finances, reducing financial sector vulnerabilities, and making it more resilient. These reforms, in conjunction with deeper economic integration between Curação and Sint Maarten, could improve the functioning of the monetary union. It is critical that any country considering dollarization carries out a serious, open, and broad public discussion of the subject, making clear the costs and benefits, and would only go forward on the basis of a strong political consensus.

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