CURRENCY BOARDS VS. DOLLARIZATION: LESSONS FROM THE COOK ISLANDS

Richard C. K. Burdekin

Modern currency boards are not necessarily precluded from financing government spending and may feature only partial foreign reserve backing. The potential dangers are highlighted by the Cook Islands case, where accelerating rates of currency issuance, combined with rising government budget deficits, led to a crisis of confidence in 1994. It is unlikely that the seigniorage gained from the short-lived currency board experiment outweighed the costs associated with the swings in policy. In the end, delayed fiscal retrenchment was accompanied by an abrupt contraction in the money supply as the local currency was withdrawn in 1995 and full dollarization re-established.

A country that is willing to give up an independent monetary policy always has the option of simply adopting an established foreign currency (such as the U.S. dollar) as the local circulating medium and "dollarizing" the economy. This practice ordinarily offers no scope for government revenue from money creation, however, leaving all such "seigniorage" revenue to accrue abroad. An "orthodox" currency board, limited to issuing domestic notes and coins that are

 $[\]it Cato\ Journal, Vol.\ 28,\ No.\ 1$ (Winter 2008). Copyright © Cato Institute. All rights reserved.

Richard Burdekin is Jonathan B. Lovelace Professor of Economics at Claremont McKenna College. He is indebted to Tanga Morris of the Cook Islands Statistics Office for supplying much of the data and thanks Dianne Thompson of the Emalus Campus of the University of the South Pacific on Vanuatu for kindly providing copies of the Cook Islands legislation referred to in this paper. Helpful comments were generously given by Ron Duncan, Kishen Rajan, Kurt Schuler, Marc Weidenmier, and Tom Willett; Wen Yu and Li Qingyang provided excellent research assistance.

fully backed by holdings of a foreign reserve currency, still prohibits independent monetary policy but does allow for seigniorage revenue earned through investing the foreign reserve holdings in interest-bearing paper like U.S. Treasury bills. The implementation of such an orthodox currency board can allow even very small economies to enjoy seigniorage revenue without compromising the discipline afforded through being linked to the chosen foreign currency. A case in point is St. Helena's currency board arrangement with the pound sterling that was launched in 1976 (Hanke and Sekerke 2003).

Not all currency boards operate in such an orthodox fashion, however. Many modern currency boards, as with Argentina's April 1991-January 2002 experience, have expanded functions that may include acting as a lender of last resort, regulating commercial banks, and financing government spending—while not always requiring 100 percent foreign reserve coverage (see, for example, Hanke 2002, Schuler 2005). Deviations from orthodoxy do not necessarily imply economic disruption. For example, the Republic of Ireland continued to enjoy almost identical price trends to those of the United Kingdom over the 1928–79 period—with the one-to-one exchange rate between the Irish pound and the pound sterling maintained throughout—even after the monetary authority's functions expanded well beyond those of an orthodox currency board (Honohan 1997). A less narrowly confined role for the monetary authority, however, means that in times of crisis there is at least some scope for currency emission serving as an escape valve.

In the Cook Islands case, money finance of the government's budget deficits, aided by reduced reserve backing for the Cook Islands dollar, allowed fiscal retrenchment to be delayed in the early 1990s. The lowered reserve backing meant that the discipline exerted by an orthodox currency board no longer prevailed in the Cook Islands case. The ultimate price of the increased monetary flexibility was a loss of confidence in the over-issued local money that forced the government to abandon the currency board entirely and restore full dollarization of the economy in 1995. This, in turn, entailed a sudden, and substantial, monetary contraction that exacerbated the economic downturn and demonstrates that the dangers of choosing

¹Under this system, the domestic monetary authority's functions are essentially limited to converting the monetary base into the established foreign currency on demand at a predetermined rate of exchange. Emissions of base money should remain at least 100 percent backed by the currency board's foreign reserve holdings.

a currency board instead of full dollarization are not limited to a possible loss of discipline. The adjustment costs involved in abandoning the currency board need to be considered as well, and the Cook Islands experience may well support the case for full dollarization as a better option for other small nations in the Pacific and elsewhere.²

Overview of the Cook Islands Case

The Cook Islands is a self-governing country in the South Pacific with the local government, and most financial activity, centered on the island of Rarotonga. The Cook Islands has maintained "free association" with New Zealand since 1965 and, for most of that period, the New Zealand dollar has functioned as the sole medium of exchange. Between 1987 and 1995, however, the Cook Islands government issued its own currency that circulated in parallel with the New Zealand dollar. Under the terms of the Currency Act of 1986–87, both the newly authorized Cook Islands notes and coins and New Zealand notes and coins were to be legal tender in the Cook Islands (Cook Islands Government 1987a).3 The Currency Reserves Act of 1987 further required 100 percent backing in foreign exchange reserves for the new Cook Islands dollar (Cook Islands Government 1987b). The government's Monetary Board, established in 1981, administered the new Cook Islands currency and coin issuance (Cook Islands Government 1981). There was no central bank, however, and local branches of banks based primarily in Australia and New Zealand administered commercial banking operations.

The Currency Reserves Amendment Act of 1989 modified the currency board arrangements by lowering the required backing on most notes and coins to just 50 percent. A still lower 2 percent backing was established for uncirculated and proof coins and coin sets and for uncut notes and souvenir sets (Cook Islands Government 1989). Further modifications, such as imposing a mere 5 perent backing for all Cook Islands notes of \$3 denomination and the exclusion of ≈

²See, for example, Duncan (2002) on the case for dollarizing the Solomon Islands, and the International Monetary Fund (2005) on the seemingly favorable experience of East Timor, which became officially dollarized in January 2000. At the very least, it would be important to make any currency board arrangements as "tamper proof" as possible. In this regard, Hanke, Jonung, and Schuler (1993: 109–13) suggest such protective measures as holding the reserve assets abroad and providing for majority foreign representation on the board of directors.

³The initial issue of notes in 1987, with denominations ranging from \$3 to \$20, was followed by a second issue in 1992 that added a \$50 denomination.

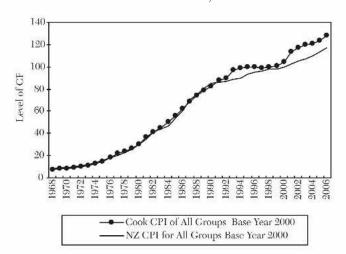
all Cook Islands notes of \$3 denomination and the exclusion of circulating coinage from reserve backing requirements, pushed the actual degree of coverage down to around 30 percent by 1993 (Asian Development Bank 1995:45).

This meant that the currency board was really being maintained in name only as the key requirement of full backing for base money issuance had already been eliminated. Accelerating rates of currency issuance in the early 1990s, combined with rising government budget deficits, eventually led to a critical loss of confidence in the Cook Islands dollar in 1994, which was followed by the withdrawal of the local currency from circulation in 1995.⁴

The Buildup of Inflationary Pressures

Prior to the issuance of the Cook Islands dollar in 1987, the common currency shared by the Cook Islands and New Zealand was accompanied by almost identical price movements in the two economies. The close relationship between the consumer price index (CPI) in each country during 1968–86 is displayed in Figure 1.

FIGURE 1
COOK ISLANDS VS. NEW ZEALAND CONSUMER
PRICE INDEXES, 1968–2006



⁴The only exception was continued production of the Cook Islands \$3 bill that was reserved for tourist sales rather than as a circulating medium.

Econometric analysis verifies that the two series are cointegrated over this period, meaning that there is a statistically significant link between them and that they tend to move together over time. This linkage is consistent with the purchasing power of money in both economies being essentially determined by the Reserve Bank of New Zealand as the sole money issuer—and is also in keeping with the analogous experience of the Republic of Ireland and the United Kingdom during 1928–79 (Honohan 1997). As shown in Figure 1, the Cook Islands CPI subsequently exhibits more marked deviations from the New Zealand CPI over the post-1987 period, and the two series are no longer found to be cointegrated when the sample period is extended through 2006. Based on Figure 1, it also appears that the respective CPIs continued to diverge even after the abandonment of the Cook Islands dollar in the mid-1990s—albeit with more similar trends emerging after 2000.

Cook Islands inflation, at first, generally trended downward after domestic note issuance began, declining from 10.8 percent in 1987 to 2.8 percent in 1992 (Table 1). Rapid currency issuance in 1992, pushing estimated M1 growth above 50 percent, was met by an acceleration of consumer price inflation to 7.3 percent in 1993, however. This acceleration followed a rise in the government's budget deficit in the early 1990s to around 4 percent of Cook Islands GDP during the 1991–92 fiscal year. After running surpluses during the 1992–93 and 1993–94 fiscal years, renewed budgetary pressures in 1994 seemed to set the stage for still more dramatic monetization. The Cook Islands national debt rose from just NZ\$24 million in 1990 to as high as NZ\$245.7 million in mid-1996, representing 133 percent of the total GDP projected for the 1996–97 fiscal year (Asian Development Bank 1996: 2).8 Relative to the Cook Islands population of 20,000 in mid-1996, this increase implied a total indebtedness

⁵The normalized cointegrating coefficient on the New Zealand CPI, relative to the Cook Islands CPI, is 0.89 and this coefficient is significant at better than the 99 percent confidence level (with a standard error of just 0.09).

⁶Each of the relevant test statistics falls well below the standard 95 percent confidence level. Test results are available from the author.

⁷There are insufficient observations for any formal cointegration tests focusing on the currency board period versus the post-currency board period.

⁸This figure includes short-term liabilities as well as approximately NZ\$90 million incurred through the government guaranteeing debt owed to Italian creditors for an incomplete hotel project. Remaining long-term debt accounted for approximately NZ\$41 million, or around 30 percent of GDP.

TABLE 1
INFLATION, MONEY, BUDGET DEFICITS, AND
OUTPUT IN THE COOK ISLANDS, 1983–2006

	Rate of Growth of Real Output	Rate of Growth of CPI	Rate of Growth of M1 ^a	Rate of Growth of M3ª	Budget Surplus as % of GDP ^b
1983 1984 1985 1986 1987 1988	4.3 12.4 12.3 14.6 8.2 13.0	7.5 11.9 12.6 10.0 10.8 8.3		 	0.4 -1.0 -0.9 -0.8 3.7 -2.5
1989 1990 1991 1992 1993 1994 1995	10.8 14.7 14.8 10.2 12.7 10.6 -3.2	6.1 5.3 5.8 2.8 7.3 2.7 0.9	14.2 9.9 54.4 3.4	21.9 -0.5 26.9 6.5 -30.0	$ \begin{array}{r} -1.1 \\ -1.8 \\ -4.0 \\ 0.4 \\ 2.1 \\ -2.5 \\ -7.5 \end{array} $
1996 1997 1998 1999 2000 2001 2002 2003	-0.3 -2.3 -0.8 2.7 13.9 4.9 2.6 8.2	-0.6 -0.4 0.8 1.4 3.2 8.7 3.4 2.0	-3.1 120.3 -6.1 9.6 16.2 14.3 8.3 30.4	-3.2 31.2 12.1 16.7 4.8 14.4 3.2 9.9	$ \begin{array}{c} -0.2 \\ -2.7 \\ -2.6 \\ -2.0 \\ 1.5 \\ 0.2 \\ -0.9 \\ -1.0 \end{array} $
2004 2005 2006	4.3 0.2 1.4	0.9 2.5 3.4	-8.7 -26.0 2.3	9.6 -5.2 22.4	2.1 2.3 3.7

^aReflects September-to-September growth rates from 1990–93 and June-to-June growth rates from 1995–2006. No 1994 data are available.

Sources: Pre-1995 monetary data are estimates drawn from the Asian Development Bank (1995: 48), and 1995 growth rates are as given in Asian Development Bank (2001: 11). All remaining figures are based on official series provided by the Cook Islands Statistics Office.

^bBased on the ratio of the budget surplus for the fiscal year beginning on July 1 (or April 1 for 1990 and earlier) to nominal gross domestic product in that year.

of approximately NZ\$12,285 per capita relative to a 1996 nominal GDP per capita of just NZ\$6,850. The government's spending spree represented, in large part, an attempt to cushion the effects of a series of negative shocks, the most important involving a drop in tourism. Even at the beginning of the 1990s the size of government employment was a weighty 11 percent of the population, and overstaffing was reflecteded in one salaried Education Department employee for every 12 students (see Davis 1992: 277–79).

Although growth of Cook Islands currency in circulation remained relatively steady in the mid-teens between 1990 and 1993, total issues of Cook Islands notes and coins more than doubled between 1992 and 1993 (Table 2). This jump in issuance did not initially add greatly to currency in circulation because most of the new notes and coins remained held in Treasury stocks. But, as budget deficit pressures mounted, this Treasury stock was used to fund the government's liquidity needs and covered approximately 20 percent of its total wage and salary bill. The Treasury stockpile was also tapped to repay advances to the government from the state-controlled Post Office Savings Bank. By October 1993, the Savings Bank's advances to the government had reached NZ\$1.7 million. Repaying these advances through currency expansion added to the upward pressure on the money supply arising from the worsening fiscal position. The overall magnitude of the government's credit demands as the crisis approached can be seen in Table 3, which shows net credit to the government rising from approximately NZ\$6.5 million in September 1992 to over NZ\$16 million in September 1993. At the same time, net foreign assets declined by nearly 50 percent, reflecting an increasingly precarious monetary and fiscal situation.

The End of the Currency Board and Economic Contraction after 1994

In the face of concerns about both the volume of issuance of Cook Islands dollars and the rising national debt, tight credit policies began being applied by the two foreign banks (ANZ and Westpac) in Rarotonga by mid-1994 (Islands Business 1995: 55). Overdrafts

⁹There were also two state-owned financial institutions: the Cook Islands Development Bank and the Post Office Savings Bank. They subsequently merged to create the government's Bank of the Cook Islands in 2001 (see International Monetary Fund 2004).

TABLE 2
GROWTH IN COOK ISLANDS
CURRENCY IN CIRCULATION, 1989–93

Total Issuance of Cook Islands Notes & Coins	Treasury Stocks	Other Government Holdings of Notes & Coins	Bank Holdings	Circulation of Cook Islands Notes & Coins	Annualized Growth Rate of Currency in Circulation
				2,020	
				2,336	15.6
8,132	3,643	535	1,198	2,755	17.9
8,432	0	435	4,936	3,061	11.1
19,332	9,285	066	5,583	3,474	13.5
19,332	8,750	888	6,056	3,635	14.6

NOTES: Currency is expressed in thousands of New Zealand dollars and excludes uncirculated coin sets, proof sets, and matched notes. All data reflect Asian Development Bank estimates.

SOURCE: Asian Development Bank (1995: 44).

	Determin Mone	TABLE 3 DETERMINANTS OF COOK ISLANDS OVERALL MONEY SUPPLY GROWTH, 1989–93	ands Overali 1, 1989–93	L	
	Private Sector Credit	Net Credit to Government	Net Foreign Assets	Others	Overall M3 Money Supply
September 1989 September 1990 September 1991 September 1992 September 1993	25,171 29,004 30,259 29,119 35,622	4,657 5,202 5,987 6,450 16,180	6,328 8,720 6,690 11,819 6,581	5,972 8,430 8,120 17,417 10,645	42,128 51,350 51,056 64,805 69,028

NOTES: All figures are expressed in thousands of New Zealand dollars and reflect Asian Development Bank estimates. SOURCE: Asian Development Bank (1995: 48).

from these banks had represented a major source of funding for the government's growing budget deficits (Asian Development Bank 1996: 1). Westpac played a particularly key role in also accepting Cook Islands notes from non-government sources and converting them at par with the New Zealand dollar, thereby effectively underwriting the local currency issues (Asian Development Bank 1995: 45). Westpac alone held over NZ\$2 million in "excess" Cook Islands currency by October 1993, and total bank holdings of Cook Islands notes and coins exceeded NZ\$ 6 million at that time (Table 2). This left the local authorities vulnerable to a run on the Cook Islands dollar (CI\$) that erupted in 1994–95 in the face of "persistent rumors of a devaluation . . ., with most of the CI\$ being converted into NZ\$" (Asian Development Bank 1996: 2). By the end of 1994, both ANZ and Westpac were refusing to convert Cook Islands dollars at par with the New Zealand dollar. Checks denominated in Cook Islands dollars became ineligible for the New Zealand Interbank Clearing System in December 1994 (Belloni 1995). Moreover, the Reserve Bank of New Zealand confirmed that it "did not guarantee the convertibility of Cook Islands currency to New Zealand currency" (Islands Business 1995: 55).

The effective rejection of the Cook Islands dollar by the two major commercial banks coupled with tight credit and capital flight had severe effects on the economy. The Asian Development Bank (1996: 2) discusses how "the volume of housing loans declined, construction activity came to a standstill, and there were layoffs. Between December 1994 and April 1995, an estimated NZ\$2 million—3 million was lost to capital flight. As CI\$ moved out in the form of NZ\$ and the external reserves declined, pressure on the availability of NZ\$ within the Cook Islands increased sharply."

In the face of the payments crisis, the Currency Amendment Act of 1994–95 stripped all Cook Islands currency above \$3 of legal tender status, made the New Zealand dollar the sole monetary unit, and established that "every bank note which is legal tender in New Zealand shall be legal tender in the Cook Islands" (Cook Islands Government 1995: 2).

Even as the budget deficit peaked above 7 percent of Cook Islands GDP during the 1995–96 fiscal year, the calling in of domestic note issues in April 1995 was accompanied by a drastic shrinkage of 30 percent in the M3 money stock in 1994–95, followed by a further decline

of over 3 percent during 1995–96. M1 data also show a decline of just over 3 percent in 1995–96. And, as depicted in Table 4, M1 dropped by 31.3 percent between the first and second quarters of 1995 as the Cook Islands notes began to be called in. Total M1 did not rise above the first quarter 1995 level until the second quarter of 1997, while M3 did not exceed the first quarter 1995 level until the third quarter of 1996. Deflation was experienced in both 1996 and 1997.

The monetary contraction and deflation were accompanied by a severe decline in real economic activity. Although the Cook Islands

TABLE 4
QUARTERLY MONETARY DATA AFTER THE
ELIMINATION OF THE COOK ISLANDS DOLLAR, 1995–97

	es and Coins Circulation	Demand Deposits	M1 Total	Term/Saving Deposits	M3 Total
1995:1	4,571	9,746	14,317	36,578	50,895
1995:2	1,343	8,487	9,830	38,798	48,628
1995:3	1,206	9,859	11,065	38,136	49,201
1995:4	1,036	10,702	11,738	38,029	49,767
1996:1	374	9,103	9,477	37,071	46,548
1996:2	182	9,339	9,521	37,547	47,068
1996:3	151	11,586	11,737	40,867	52,604
1996:4	138	12,648	12,786	42,428	55,214
1997:1	137	10,944	11,081	44,275	55,356
1997:2	137	20,834	20,971	40,767	61,738
1997:3	137	16,443	16,580	44,220	60,800
1997:4	137	18,744	18,881	44,989	63,870

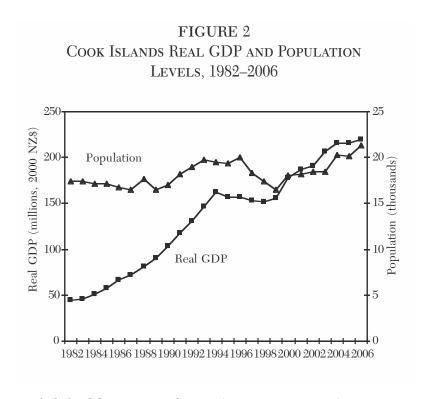
Note: Data are expressed in thousands of New Zealand dollars.

SOURCE: Cook Islands Statistics Office.

¹⁰All notes above \$3 had to be redeemed by June 1996.

had faced a more challenging economic environment in the 1990s than in the 1980s, real output growth remained in double digits until 1994. The ensuing currency withdrawal, combined with a fiscal austerity drive, saw real output growth plunge from 10.6 percent in 1994 to -3.2 percent in 1995, and then remain in negative territory until 1999. Meanwhile, the Cook Islands Islands population fell from 20,000 in 1996 to 16,500 in 1999 as many islanders exercised their right to reside in New Zealand and fled the shrinking island economy. Figure 2 shows the sharp population drop that accompanied the stagnating real GDP levels of the second half of the 1990s. Although the calling in of the local currency was only one factor in the contraction, drastic money supply reduction almost certainly exacerbated the decline in economic activity on the islands.

¹¹The period of strong output growth actually dates back to 1978. Real output pre-



viously declined during 1970–78, however (see Davis 1992: 294–98).

¹²Fiscal austerity was essentially forced on the government by the 1996 fiscal crisis, which saw the government face increasing difficulties in paying its bills until, by the last quarter of the 1995–96 fiscal year, "the Government could not avoid defaulting

Conclusion

Even in such a small open economy, Cook Islands inflation seems to have been very responsive to swings in domestic rates of money growth through the time of the 1995 currency reform. Consumer price inflation accelerated after the spike in money issue in 1992 and then fell back into negative territory as the money supply shrank in the period surrounding the calling in of the local money issue. This episode offers further evidence of the long reach of Milton Friedman's famous proposition that "inflation is always and everywhere a monetary phenomenon" (see also Burdekin and Weidenmier 2001). The monetary expansion of the early 1990s did more than fuel inflation in this case, however. It produced a crisis of confidence in the local currency that forced its withdrawal from circulation and, in turn, caused the delayed tightening of fiscal policy to be combined with a sharp monetary contraction as well. It is unlikely that the seigniorage gained from the short-lived currency board experiment outweighed the costs associated with the swings in policy that ended up exacerbating the eventual economic downturn and all the disruptions involved in the return to exclusive use of the New Zealand dollar.

Other small states may well want to consider the potential pitfalls of selecting a currency board over full dollarization that are highlighted by the Cook Islands experience. Although the breakdown of the Cook Islands dollar occurred only after the government had reined in the original 100 percent reserve backing for the currency board, the key issue is whether a way can be found to definitively guard against this kind of slippage when pressures for faster rates of monetary expansion emerge in the economy. "Outsourcing" the currency board assets and providing for foreign oversight, as proposed by Hanke, Jonung, and Schuler (1993), represents one possibility, while another may be to go so far as writing the 100 percent reserve backing into the constitution. In essence, the tradeoff with full dollarization boils down

on payments to a number of creditors" (Asian Development Bank 1996: 2). Publicservice staff was then cut from more than 3,200 prior to the crisis to fewer than 1,500 by mid-1997 (Mellor 1997: 18). The restructuring program, which also included measures aimed at supporting private-sector growth and competitiveness, was supported by a series of loans from the Asian Development Bank. The reforms were accompanied by a sharp rise in Cook Islands governance performance based on the index compiled by Duncan and Gani (2007) that takes into account rule of law, government effectiveness, and regulatory quality.

to the seigniorage gained vs. the risk that the currency board arrangements will end being abused in some way when push comes to shove, whether through an explicit relaxation of the rules (as in the Cook Islands case) or through some fudging of the rules.

References

- Asian Development Bank (1995) Cook Islands: Economic Performance, Issues, and Strategies. Manila, Philippines.
- _____ (1996) Cook Islands: Economic Performance, Issues, and Strategies—Update. Manila, Philippines.
- _____ (2001) Cook Islands: Country Strategy and Program Update (2002–2004). Manila, Philippines.
- Belloni, S. (1995) Cook Islands: Brief Review of the Current Status of the Currency, the Economy and the Reform of Public Sector. Port Vila, Vanuatu: United Nations Economic and Social Commission for Asia and the Pacific.
- Burdekin, R. C. K., and Weidenmier, M. D. (2001) "Inflation Is Always and Everywhere a Monetary Phenomenon: Richmond vs. Houston in 1864." *American Economic Review* 91 (5): 1621–30.
- Cook Islands Government (1981) Cook Islands Monetary Board Act 1981. Rarotonga: T. Kapi, Government Printer, December 1 (1981, No. 18).
- _____ (1987a) Currency Act 1986–87. Rarotonga: T. Kapi, Government Printer, April 15 (1986–87, No. 32).
- _____ (1987b) Currency Reserves Act 1987. Rarotonga: T. Kapi, Government Printer, July 28 (1987, No. 7).
- (1989) Currency Reserves Amendment Act 1989. Rarotonga: T. Kapi, Government Printer, May 2 (1989, No. 9).
- _____(1995) Currency Amendment Act 1994–95. Rarotonga: Government Printer (1994–95, No. 40).
- Cook Islands Statistics Office, Rarotonga (www.stats.gov.ck).
- Davis, T. (1992) Island Boy: *An Autobiography*. Suva, Fiji: Institute of Pacific Studies, University of the South Pacific.
- Duncan, R. (2002) "Dollarising the Solomon Islands Economy." *Pacific Economic Bulletin* 17 (2): 145–46.
- Duncan, R., and Gani, A. (2007) "Constructing a Governance Index for Cook Islands, 1985–2005." *Pacific Economic Bulletin* 22 (2): 104–18.
- Hanke, S. (2002) "On Dollarization and Currency Boards: Error and Deception." *Journal of Policy Reform* 5 (4): 203–22.
- Hanke, S., and Sekerke, M. (2003) "St. Helena's Forgotten Currency

- Board." Central Banking 13 (3): 77-81.
- Hanke, S. H., Jonung, L., and Schuler, K. (1993) Russian Currency and Finance: A Currency Board Approach to Reform. London: Routledge.
- Honohan, P. (1997) "Currency Board or Central Bank? Lessons from the Irish Pound's Link with Sterling, 1928–79." *Banca Nazionale* del Lavoro Quarterly Review 50 (200): 39–67.
- International Monetary Fund (2004) Cook Islands: Assessment of the Supervision and Regulation of the Financial Sector, Volume I—Review of Financial Sector Regulation and Supervision. IMF Country Report No. 04/413, Washington, D.C.
- (2005) Democratic Republic of Timor-Leste: Selected Issues and Statistical Appendix. IMF Country Report No. 05/250, Washington, D.C.
- *Islands Business* (1995) "The Trouble with the Cook Islands Dollar." Vol. 21 (1), January: 55.
- Mellor, C. S. (1997) "Economic Restructuring in the Cook Islands: A Review." *Pacific Economic Bulletin* 12 (2): 17–24.
- Schuler, K. (2005) "Some Theory and History of Dollarization." *Cato Journal* 25 (1): 115–25.