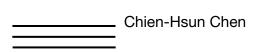
TAIWAN'S BURGEONING BUDGET DEFICIT

A Crisis in the Making?



Abstract

The Taiwan economy in recent years has been plagued by low or negative growth and rising structural unemployment, two kinds of turbulence that have been developing for some time. Underneath these economic woes is the even more serious problem of growing budget deficits that, if unchecked, could lead to a slippery road for Taiwan in the long run. Shrinking revenue and rising government spending in social welfare areas cause widening budget deficits. The continual swelling of these deficits is an important area requiring reform.

The Emergence of Budget Deficits

Since 1949, Taiwan has pursued its own distinct, divergent path of institutional transformation. As a result, the island has progressed away from its largely agricultural base in the 1950s, becoming a center of innovative technology and thus providing a unique example of successful institutional transition in East Asia. Nevertheless, in recent years, Taiwan has experienced declining economic growth rates and increasing unemployment, two types of turbulence that have actually been developing for quite some time.

As Table 1 indicates, between 1980 and 2004, Taiwan achieved a peak economic growth rate of 12.74% in 1987; since then, however, the rate has been gradually declining and by 2004 was down to 5.71%. Taiwan's economic growth subsequently has slowed even further because of the gradual cooling of the global economic climate from the second half of 2001. That year the island's

Chien-Hsun Chen is Research Fellow at the Chung-Hua Institution for Economic Research, Taipei, Taiwan. E-mail: <chchen@mail.cier.edu.tw>. An earlier version of this article was written while the author was visiting at the East Asian Institute, National University of Singapore. The author is especially grateful to John Wong and an anonymous reviewer for their most useful suggestions.

Asian Survey, Vol. 45, Issue 3, pp. 383–396, ISSN 0004-4687, electronic ISSN 1533-838X. © 2005 by The Regents of the University of California. All rights reserved. Please direct all requests for permission to photocopy or reproduce article content through the University of California Press's Rights and Permissions website, at http://www.ucpress.edu/journals/rights.htm.



TABLE 1 Taiwan's Major Economic Indicators

1980 7.30 1.2 0.08 2.21 1881 6.16 1.4 1.41 7,24 1982 3.55 2.1 3.32 8.53 1983 8.45 2.7 4.84 11.86 1984 10.60 2.5 8.50 15.66 1985 4.95 2.9 10.62 22.56 1986 11.64 2.7 15.70 46.31 1987 12.74 2.0 18.70 76.75 1988 7.84 1.7 11.00 73.90 1989 8.23 1.6 14.04 73.22 1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11		Growth Rate (%)	Unemployment Rate (%)	Trade Balance (US\$billion)	Foreign Reserves (US\$billion)
1982 3.55 2.1 3.32 8.53 1983 8.45 2.7 4.84 11.86 1984 10.60 2.5 8.50 15.66 1985 4.95 2.9 10.62 22.56 1986 11.64 2.7 15.70 46.31 1987 12.74 2.0 18.70 76.75 1988 7.84 1.7 11.00 73.90 1989 8.23 1.6 14.04 73.22 1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67	1980	7.30	1.2	0.08	2.21
1983 8.45 2.7 4.84 11.86 1984 10.60 2.5 8.50 15.66 1985 4.95 2.9 10.62 22.56 1986 11.64 2.7 15.70 46.31 1987 12.74 2.0 18.70 76.75 1988 7.84 1.7 11.00 73.90 1989 8.23 1.6 14.04 73.22 1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91	1881	6.16	1.4	1.41	7,24
1984 10.60 2.5 8.50 15.66 1985 4.95 2.9 10.62 22.56 1986 11.64 2.7 15.70 46.31 1987 12.74 2.0 18.70 76.75 1988 7.84 1.7 11.00 73.90 1989 8.23 1.6 14.04 73.22 1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90	1982	3.55	2.1	3.32	8.53
1985 4.95 2.9 10.62 22.56 1986 11.64 2.7 15.70 46.31 1987 12.74 2.0 18.70 76.75 1988 7.84 1.7 11.00 73.90 1989 8.23 1.6 14.04 73.22 1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31	1983	8.45	2.7	4.84	11.86
1986 11.64 2.7 15.70 46.31 1987 12.74 2.0 18.70 76.75 1988 7.84 1.7 11.00 73.90 1989 8.23 1.6 14.04 73.22 1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66	1984	10.60	2.5	8.50	15.66
1987 12.74 2.0 18.70 76.75 1988 7.84 1.7 11.00 73.90 1989 8.23 1.6 14.04 73.22 1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07	1985	4.95	2.9	10.62	22.56
1988 7.84 1.7 11.00 73.90 1989 8.23 1.6 14.04 73.22 1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1986	11.64	2.7	15.70	46.31
1989 8.23 1.6 14.04 73.22 1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1987	12.74	2.0	18.70	76.75
1990 5.39 1.7 12.50 72.44 1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1988	7.84	1.7	11.00	73.90
1991 7.55 1.5 13.32 82.41 1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1989	8.23	1.6	14.04	73.22
1992 7.49 1.5 9.46 82.31 1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1990	5.39	1.7	12.50	72.44
1993 7.01 1.5 8.03 83.57 1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1991	7.55	1.5	13.32	82.41
1994 7.11 1.6 7.70 92.45 1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1992	7.49	1.5	9.46	82.31
1995 6.42 1.8 8.11 90.31 1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1993	7.01	1.5	8.03	83.57
1996 6.10 2.6 14.68 88.04 1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1994	7.11	1.6	7.70	92.45
1997 6.37 2.7 7.67 83.50 1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1995	6.42	1.8	8.11	90.31
1998 4.33 2.7 5.91 90.34 1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1996	6.10	2.6	14.68	88.04
1999 5.32 2.9 10.90 106.2 2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1997	6.37	2.7	7.67	83.50
2000 5.78 3.0 8.31 106.7 2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1998	4.33	2.7	5.91	90.34
2001 -2.22 4.6 15.66 122.2 2002 3.94 5.2 18.07 161.7	1999	5.32	2.9	10.90	106.2
2002 3.94 5.2 18.07 161.7	2000	5.78	3.0	8.31	106.7
	2001	-2.22	4.6	15.66	122.2
2003 3.33 5.0 16.93 206.7	2002	3.94	5.2	18.07	161.7
	2003	3.33	5.0	16.93	206.7
2004 5.71 4.4 6.12 241.7	2004	5.71	4.4	6.12	241.7

SOURCES: *Taiwan Statistical Data Book, 2004* (Taipei: Council for Economic Planning and Development, 2004); *Quarterly National Economic Trends Taiwan Area* (Taipei: Directorate-General of Budget, Accounting, and Statistics, Executive Yuan, February 2005).

growth rate as a whole fell to -2.22%, putting Taiwan into recession for the first time since 1950. A low unemployment rate is consistent with high economic growth; conversely, an increase in the unemployment rate results from a lingering economic slump. There are several reasons for current structural unemployment in Taiwan: (1) more-traditional industries are now faced with growing competition from newly industrialized countries; (2) the investment environment is deteriorating because it is cheaper to do business in mainland China, which has attracted massive investment away from Taiwan; and (3) in consequence, the service sector's ability to absorb greater proportions of the

available labor force has weakened. As a result, the annual unemployment rate has risen steadily from 1.5% in 1991 to 2.6% in 1996 and 4.4% in 2004. The unemployment rate hit a record monthly high of 5.35% in August 2002. The outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003 also boosted uncertainty over Taiwan's future economic prospects.

Nevertheless, Taiwan has basked in prolonged trade surpluses and huge foreign reserves (see Table 1). Although public finance there has enjoyed a long period of surplus (given that the island's current account has been large enough to offset all of its capital account expenditure), the sector has nevertheless witnessed dramatic changes in how public financing is undertaken. From the mid-1980s onward, a structural change occurred in public financing, with Taiwan abandoning its long-time fiscal discipline and engaging in deficit spending.¹ As a result, Taiwan experienced its first huge budget deficit in 1989 (a 7.3%) share of gross domestic product [GDP]), a situation that has worsened ever since (see Table 2). In 1991, Taiwan launched a new series of major infrastructure projects and significantly expanded its social welfare programs with the introduction of measures such as the Six-Year Plan for National Development and the National Health Insurance Program. An inevitable rapid rise in fiscal spending followed. In 1992, the wholesale retirement of senior legislators and entry of a large number of Democratic Progressive Party (DPP) members into the Legislative Yuan prompted an even greater transformation in Taiwanese politics. The whole idea of a welfare state had, in fact, been proposed and promoted by the DPP in order to increase the party's chances of defeating the Kuomintang (KMT) in government elections. Nevertheless, the KMT subsequently switched to the same welfare program ticket, leading to a rush of promises designed primarily to please voters. Too many promises on social welfare have since led to an increase in overall government expenditure, while spending on social welfare programs has escalated dramatically.²

With the increase in fiscal expenditure outpacing growth in tax revenues, Taiwan turned to public debt issues and borrowing to finance the growing budget deficit. With the fiscal situation rapidly worsening from 1991 onward, by 1995 the deficit had reached an all-time high of NT\$ 350.6 billion (US\$12.86 billion), a 5% share of GDP. This provides an astonishing example of how easy it is for an economy to transform itself from one with a zero budget deficit to one with consecutive years of substantial deficits. Among the many reasons capable of explaining such a dramatic change in fiscal structure, two—the expansion in social welfare programs and corruption—stand out as major factors.

^{2.} See K. N. Sun, "Public Revenue, Expenditure, and Fiscal Reform," in *Taiwan's Economic Success since 1980*, eds. C. C. Mai and C. S. Shih (Cheltenham, U.K.: Edward Elgar, 2001), pp. 378–413.



^{1.} See G. P. Jenkins, C. Y. Kuo, and K. N. Sun, *Taxation and Economic Development in Taiwan* (Cambridge, Mass.: Harvard University Press, 2003).

TABLE 2 Taiwan's Major Fiscal Indicators

	Budget Surplus or Deficit (NT\$ billion)	Budget Surplus or Deficit/GDP (%)	Outstanding Debt (NT\$ billion)	Outstanding Debt/GDP (%)
1980	0.3	0.02	18.4	1.2
1981	-14.0	-0.8	25.7	1.5
1982	-32.8	-1.7	43.4	2.3
1983	-28.8	-1.4	48.3	2.3
1984	9.7	0.4	43.1	1.8
1985	-3.7	-0.2	44.1	1.8
1986	-31.9	-1.1	59.0	2.1
1987	8.3	0.3	90.8	2.8
1988	39.0	1.1	141.2	4.0
1989	-285.8	-7.3	190.1	4.8
1990	-5.1	-1.3	202.9	4.7
1991	-225.7	-4.7	268.9	5.6
1992	-304.4	-5.7	566.8	10.6
1993	-340.0	-5.7	798.5	13.5
1994	-323.6	-5.0	918.6	14.2
1995	-350.6	-5.0	1,108.1	15.8
1996	-239.6	-3.1	1,668.4	21.7
1997	-174.0	-2.1	1,848.1	22.2
1998	60.9	0.7	2,079.9	23.7
1999	-45.6	-0.5	2,227.4	24.0
2000	-356.1	-3.7	2,585.5	26.8
2001	-375.0	-4.0	3,025.1	31.7
2002	-357.0	-3.7	2,891.4	29.7
2003	-358.0	-3.6	3,169.8	32.2

SOURCES: Taiwan Statistical Data Book, 2004; Ministry of Finance (MOF), Taiwan, http://www.mof.gov.tw, accessed May 23, 2005.

Restraint of Budget Deficits

In an effort to bring its huge budget deficits under control, in 1993 the Taiwanese government adopted a number of fiscal reform measures aimed at reducing the imbalance between government revenues and fiscal outlays in an effort to set in place the foundation for a more sound taxation and expenditure system. The aim of the fiscal reform package was to improve the fiscal situation and achieve the National Development Council's (NDC) goal of having a balanced budget by 2001. Because of the significant jump in government revenue growth, from 6.3% in 1997 to 20.5% in 1998, Taiwan recorded a budgetary surplus in the latter year, of NT\$ 60.9 billion (US\$1.89 billion), its first since

1989. Nevertheless, 1999 saw the appearance once again of a budgetary deficit, of NT\$ 45.6 billion (US\$1.45 billion), as a result of the 2.9% increase in government spending (although this was down from the 6.1% rise the previous year) coupled with a 2.4% decline in government revenues, mainly because of aftershocks from the 1997 Asian financial crisis.³

Swelling Budget Deficits

On May 20, 2000, the change in the ruling party in Taiwan completed the island's political transformation; however, with the slowdown of the global economy in the latter half of that year, there was a corresponding decline in Taiwan's economic growth and an increase in the unemployment rate. In the wake of its political transformation, Taiwan now stands at a critical juncture in its history. The slowdown has cut into tax revenues, broadening the fiscal deficit and driving up domestic public debt. The budget deficit jumped from 0.5% of GDP in 1999 to 3.6% in 2003, and with the total outstanding public debt rising from NT\$ 2.23 trillion (US\$70.94 billion) in 1999 to NT\$ 3.1698 trillion (US\$93.29 billion) in 2003, the ratio of outstanding debt to GDP represented a considerable increase from 24.0% to 32.2%.

Under the new amendment to the Public Debt Law passed in January 2002, the public debt ceiling (i.e., public debt to total government expenditure) will remain at 15%; however, funds borrowed to pay off existing debts will be excluded from this proportion.⁵ Taiwan has tentatively budgeted for an income of NT\$ 1.375 trillion (US\$44.17 billion) in 2005 and a total expenditure of NT\$ 1.7337 trillion (US\$55.69 billion), which would bring the budget deficit up to NT\$ 358.7 billion (US\$11.52 billion) for the year, a 3.4% share of GDP.⁶ The "Excessive Deficit Procedure" of the 1992 Maastricht Treaty on Economic and Monetary Union (EMU) requires that a country's overall budget deficit for each fiscal year be less than or equal to 3% of its GDP, while its gross public debt must be less than or equal to 60% of GDP. Therefore, as of 2005, Taiwan's budget deficit seems unsustainable in comparison.

The dramatic increase in the budget deficit has much to do with the government's frenzied efforts to institute tax cuts, including a reduction in the land value increment tax, exemption of the business tax for financial institutions,

^{6.} See DGBAS, http://www.dgbas.gov.tw, accessed May 23, 2005.



^{3.} For a detailed description of Taiwan's fiscal reform, see D. Wei, C. Y. Hsu, T. C. Lu, and H. K. Tsai, "Fiscal Reform Policy Formation, Implementation, and Results after Ten Years," in *Conference on Balanced Budgets and Economic Development*, ed. C. C. Mai (Taipei: Chung-Hua Institution for Economic Research, 1999), pp. 17–76.

^{4.} The 2000 fiscal year began on July 1, 1999, and ended on December 31, 2000. Prior to this, the fiscal year ran from July 1 to June 30.

^{5.} See Statistical Handbook (Taipei: Directorate-General of Budget, Accounting, and Statistics [DGBAS], Executive Yuan, September 2003).

adoption in 1998 of the integrated income tax system, and the expansion of tax incentives for certain industries.⁷ Nevertheless, the greatest pressure on the government budget now comes from growing demands for improvements to the island's infrastructure and social welfare spending, including reform of the deficit-plagued national health insurance program, initiated early in 1995.⁸ As the budget deficit continues to rise, largely because of grossly overestimated revenues, the government in Taipei has utilized operational funds as a means of hiding the debt in order to evade the debt ceiling; therefore, the island's budget deficit problem may well be much more serious than statistics suggest.

Government Expenditure Structure

The structure of government expenditure is shown in Table 3, which highlights significant features, indicating that (1) the proportion of expenditure on national defense has continued to fall since 1980; (2) expenditure on education, science, culture, and social welfare has risen continuously; and (3) spending on debt services (obligations) increased rapidly during the 1990s as a result of the deteriorating budget deficit. Furthermore, expenditures for education and scientific and cultural development are all well above the 15% level required by the Taiwan Constitution.⁹

Table 3 demonstrates the rapid rise in the proportion of total expenditure on social welfare, which has replaced national defense spending to account for the lion's share of all government expenditure. From 1993 to 1997 in particular, the ratio of social welfare spending increased for five consecutive years, reaching an all-time high of 28.9% in 1997. Increased social welfare spending clearly has a direct impact on budget deficits, while the expansion in social welfare programs tends to foster public expectations of a more secure future. With such expectations, savings behavior and work effort will move toward what economic theories suggest: a demand for lower savings and less work effort. C. Y. Tsai's empirical work indicates that an increase in social welfare spending would impede economic growth in Taiwan. ¹⁰ Ironically, the level of

^{10.} See C. Y. Tsai, *The Macroeconomic Impact of Social Welfare Expenditure in Taiwan* (Taipei: Sun Yat-Sen Institute for Social Sciences and Philosophy, Academia Sinica, Monographs Series, no. 42, 1997).



^{7.} The integrated income tax system reduced the highest combined tax burden on investment income from 55% to 40%, further lowering the overall tax burden in Taiwan. The new system also relieved the anomaly of double taxation of investors and shareholders.

^{8.} T. W. Ho points out that Taiwan's expansionary fiscal policy has become relatively less effective since the 1980s. See T. W. Ho, "Consumption and Government Spending Substitutability Revisited: Evidence from Taiwan," *Scottish Journal of Political Economy* 48:5 (November 2001), pp. 589–604.

^{9.} For a discussion on the role of the government in Taiwan's economic development, see K. N. Sun, "Analysis of the Political and Economic Factors behind the Growth of Government Expenditure in Taiwan," *Public Finance Review* 29:4 (July 1997), pp. 1–20.

TABLE 3	Taiwan's Government Expenditure Structure (in %)	ent Expenditu	re Structure (in %)				
	General Administration	National Defense	Education, Science, and Culture	Economic Development	Social Security	Obligation	Others
1980	9.4	30.3	15.5	32.0	11.2	0.5	1.0
1981	6.6	24.6	17.7	34.1	12.0	0.4	1.2
1982	10.3	24.6	18.0	30.3	14.7	0.5	1.7
1983	11.1	27.4	19.7	24.7	15.4	6.0	8.0
1984	10.6	24.4	19.5	27.4	16.1	1.1	6.0
1985	11.3	24.8	20.5	25.3	16.2	1.1	6.0
1986	11.4	24.9	21.0	25.1	16.0	6.0	8.0
1987	11.2	23.2	20.9	26.7	16.0	1.1	6.0
1988	11.0	22.1	20.4	26.5	18.1	1.1	0.8
1989	8.1	15.6	17.1	44.8	12.6	6.0	1.0
1990	11.5	19.2	21.1	27.5	18.2	1.5	1.0
1991	12.0	17.8	23.0	25.2	18.4	2.6	1.0
1992	12.7	15.3	21.2	29.6	18.4	2.2	0.7
1993	11.9	14.4	20.4	31.1	17.7	3.6	8.0
1994	11.8	17.6	20.9	25.6	19.2	4.1	9.0
1995	11.6	14.1	18.7	22.9	21.7	10.2	9.0
1996	13.2	15.5	20.3	17.9	26.9	5.8	0.5
1997	13.0	15.5	20.0	15.7	28.9	6.2	0.7
1998	12.9	15.7	20.7	16.8	27.4	5.8	8.0
1999	13.6	14.0	20.9	17.1	26.9	6.9	9.0
2000	14.9	11.4	20.9	15.1	28.7	8.6	0.4
2001	14.5	10.9	18.9	17.6	30.0	7.6	9.0
2002	15.2	10.5	20.5	19.0	26.2	8.0	9.0

SOURCES: Taiwan Statistical Data Book, 2004; DGBAS, http://www.dgbas.gov.tw, accessed December 30, 2003.

economic development has also tended to fall. It seems, therefore, that social welfare is crowding out economic development.

The changing demographics of Taiwanese society and their implications for welfare provision require much more attention. Statistics show that there are roughly two million people in Taiwan aged 65 years or older, accounting for 8.5% of the population. Taiwan is aging rapidly and, indeed, the total number of elderly plus disabled persons is expected to reach 14% of the population within a decade. The proportion of Taiwan's population aged 65 or older will reach 13.82% by 2020 and 21.65% by 2136. Given the government's limited role in income redistribution, the planning of social welfare programs must be carefully done, to ensure they can operate sustainably.

The Financing of Budget Deficits

The financing of government expenditure takes one of three alternative forms: raising taxes, issuing bonds, or printing money. If we take the proportion of GNP accounted for by tax revenues as the tax burden, this burden, as Table 4 reveals, has been shrinking each year for the past decade. In the first half of the 1980s, the tax burden was between 16.1% and 19.6% of GNP, but this began to decline from 1996 and by 2003 the rate had fallen to 12.3%. Per capita tax revenue that year was only NT\$ 55,545 (US\$1,635). Compared to the advanced countries, where the tax burden ranges from 20% to 35% of GNP, Taiwan's burden is relatively low. There has been a steady downward trend, closely related to the competition between political parties.

Hence, in light of the current tax burden, public spending must be curbed—otherwise the government cannot do much to further reduce taxation. However, because the government cannot reduce public spending owing to substantial increases in social welfare programs, the only alternative way of financing spending is to increase the public debt. The proportion of public bonds to GDP was 24.20% in 2003. Taiwan's external public debt is declining and its debt service ratio quite low (see Table 5). The prospects for tax reform have also been severely impeded by President Chen's promise not to raise taxes during his first term in office (2000–04), and because the government would not dare either to raise taxes or print substantial amounts of money as a means of financing government spending, Taiwan must continue to rely heavily on domestic bonds to finance the fiscal gap.

Taiwan is currently planning to issue a total of NT\$ 255 billion (US\$8.19 billion) of state bonds in fiscal year 2005 to help to cover its deficit for the year. In 2002, the debt issue included NT\$ 250 billion (US\$7.19 billion) worth of government bonds, NT\$ 152.3 billion (US\$4.38 billion) in debt-service bonds,

^{11.} See *Taipei Times* (in English), June 3, 2003.



TABLE 4 Taiwan's Tax Burden and Per Capita Tax Revenue

	Tax Burden (%)	Tax Revenues/Population (NT\$ Per Capita)	
1980	19.6	14,952	
1981	19.3	17,694	
1982	18.4	18,642	
1983	17.2	18,549	
1984	17.1	20,465	
1985	16.1	20,767	
1986	15.0	20,864	
1987	14.7	23,719	
1988	16.2	28,366	
1989	17.8	34,034	
1990	20.1	42,161	
1991	17.4	39,730	
1992	18.6	47,070	
1993	18.2	50,257	
1994	17.9	53,702	
1995	18.0	58,186	
1996	16.1	56,084	
1997	15.7	59,068	
1998	16.0	64,253	
1999	14.7	61,793	
2000	13.2	87,351	
2001	12.9	56,304	
2002	12.3	54,575	
2003	12.3	55,545	

SOURCES: Taiwan Statistical Data Book, 2004; Taiwan Tax Revenues Statistical Yearbook, 2001 (Taipei: MOF, 2001); Quarterly National Economic Trends Taiwan Area (February 2005). NOTE: Tax burden is tax and monopoly revenues divided by GNP.

NT\$ 10 billion (US\$0.29 billion) in highway bonds, and another NT\$ 10 billion in construction bonds carried over from the previous fiscal year. ¹² By May 2003, Taiwan's Legislative Yuan had approved a special NT\$ 50 billion (US\$1.47 billion) budget without cutting any funds to support the anti-SARS campaign. ¹³ As Taiwan approached its 2004 presidential election, the ruling DPP proposed NT\$ 550 billion (US\$17.23 billion) for a new Five-Year Plan

^{13.} See *Taiwan Economic News*, http://news.cens.com>, accessed August 3, 2003.



^{12.} See ibid., May 24, 2003.

TABLE 5 Outstanding Public Bonds and Public Debt Service Ratio

	Public Bonds (NT\$ million)	Public Bonds/GDP (%)	External Public Debt (US\$million)	Public Debt Service Ratio (%)
1980	10,910	0.73	980.7	4.33
1981	10,600	0.60	1,063.3	4.08
1982	19,480	1.03	1,263.0	4.92
1983	36,860	1.76	1,284.3	4.45
1984	34,490	1.47	1,698.6	4.89
1985	41,620	1.68	1,416.9	4.00
1986	58,375	2.04	2,113.8	4.57
1987	86,750	2.68	1,956.1	3.18
1988	135,625	3.85	438.1	0.61
1989	183,000	4.65	541.7	0.73
1990	147,375	3.42	398.8	0.53
1991	202,250	4.20	269.7	0.32
1992	367,875	6.89	323.2	0.35
1993	550,500	9.30	99.9	0.10
1994	636,000	9.84	89.3	0.08
1995	724,750	10.33	90.9	0.07
1996	785,000	10.22	48.3	0.04
1997	939,250	11.28	47.5	0.03
1998	988,000	11.05	31.2	0.02
1999	964,900	10.39	17.6	0.01
2000	1,347,820	13.95	7.8	0.00
2001	1,674,820	17.61	7.4	0.01
2002	2,026,020	20.81	7.0	0.005
2003	2,382,661	24.20	5.9	0.004

SOURCE: DGBAS, http://www.mof.gov.tw">, accessed December 30, 2003; MOF, Taiwan, http://www.mof.gov.tw, accessed May 23, 2005.

NOTE: External public debt is direct debt of the central government (repayment and interest), central government guaranteed obligations, and debt guaranteed by financial institutions. Public debt service ratio is external public debt divided by foreign exchange income from goods and services.

and a new commitment of NT\$ 770 billion (US\$24.12 billion) to purchase U.S. weapons. This will lead to a dramatic rise in both the budget deficit and public debt.

Vicious Political Business Cycle

As of 2005, the estimated budget deficit was around NT\$ 358.7 billion (US\$11.52 billion). The continual swelling of the budget deficit is an important area requiring reform, but neither the ruling party nor the opposition parties have been



able to reach any consensus on plans to balance the budget deficit. Based on the Temporary Provisions for Elderly Welfare Subsidy (passed May 10, 2002), Taiwan now provides its elderly population with regular subsidies. It is estimated that around 440,000 senior citizens qualified for a monthly stipend of NT\$ 3,000 (US\$83) starting from June 2002 but implemented on a retroactive basis to January. As a result, Taiwan's government is handing out a very generous total of NT\$ 16 billion (US\$0.46 billion) to all persons aged 65 years or above.14

Clearly, however, during this period of economic contraction, this package of NT\$ 16 billion for the elderly will crowd out other social welfare programs, such as those for women and children, the disabled, and the unemployed.¹⁵ Nevertheless, the DPP has actually supported expansion of these elderly welfare subsidies, even beyond the original opposition party proposals. The DPP's enthusiasm for more subsidies proves that both the ruling and opposition parties care more about winning votes than pursuing fiscal discipline. 16

Voters themselves would clearly like to see substantial increases in government spending, but they are fiercely resistant to increases in taxation. Ever since the beginning of democratization, the KMT obediently approved a stream of social welfare programs such as the massive National Health Insurance scheme, while avoiding any significant tax increases. It seems clear, however, that turning social welfare policy into an election tool in such a way will not only create budget deficit problems but also distort the efficient distribution of public resources. Thus, a vicious political business cycle will prevail. There is no such thing as a free lunch! Not only will the public suffer, but so will the parties, as they will continue to be unable to satisfy the demands of vested interests groups.

The Budget Deficit Does Matter

The government response to the present economic contraction and increasing budget deficit in Taiwan is to utilize tax cuts and concentrate on the issuance of bonds. However, Taiwan is a small-scale open economy, serving as a manufacturing base for global enterprises' division of labor and becoming an integral part of a global market. Thus, if the government continues to issue bonds to finance its increasing level of public spending, this will drive up domestic

^{16.} Former Premier Yu Shyi-kun indicated that the budget deficit is expected to be balanced in five to ten years. See Straits Times, October 9, 2002. There is a need to forge a national consensus regarding the tax reform program during President Chen's second term (2004-08). See Taipei Times, June 26, 2004.



^{14.} See Taipei Times, May 20, 2002.

^{15.} Unemployment benefits are only available for six months, whereas the average time taken to find a job is nine months. See ibid., October 8, 2002.

money market interest rates and bring about foreign capital inflows.¹⁷ The rising interest rates will in turn lead to higher borrowing costs for companies, individuals, and the government, crowding out investment. Under the floating exchange regime now in place, the NT dollar will inevitably appreciate and exports will decline. Therefore, the positive effects of increased domestic demand through the issuing of bonds to finance public spending may well be completely offset by economic contraction stemming from falling investment and exports, thus demonstrating the limited effectiveness of government spending financed by public debt.

The findings of empirical testing by T. S. Yu et al. indicate that bond-financed spending could stimulate consumer spending, reduce the domestic savings rate, and crowd out private investment in Taiwan. Furthermore, under the restrictions imposed by the Budgetary Law, bond revenue cannot be applied to current-account expenditure. If a central government does employ revenue from bond issues to subsidize local government current-account expenditures, this will clearly undermine principles of fiscal soundness.

The Crux of the Budget Deficit Problem

Taiwan has called for a tax reform to balance its budget deficit by 2010. As shown in Table 2, Taiwan has not achieved a balanced budget since 1998, indicating that the government is unable to make ends meet and is thus faced with increasing budget deficits year after year. Public finances in Taiwan are therefore in dire straits, with the government's outstanding debt having jumped from NT\$ 2.0799 trillion (US\$64.55 billion) in 1998, to a forecast of NT\$ 3.429 trillion (US\$107.42 billion) for fiscal year 2004. The budget deficit and national debt have further ballooned to new recorded highs; total government outstanding debt reached NT\$ 4.2 trillion by 2003 (US\$120.86 billion) instead of the NT\$ 3.2 trillion (US\$94.17 billion) the government reported. If debts from trust funds and other agencies are combined, by 2003 total outstanding government debt stood at NT\$ 9.3551 trillion (US\$275.31 billion), equivalent to 91.04% of GDP. To demonstrate this deficit more dramatically, if government debt in Taiwan were to be divided equally among the total population, for 2003 each citizen faced a personal debt of NT\$ 410,000 (US\$12,066). 19 This kind of inter-temporal income substitution is fiscally immoral, because the next

^{19.} See Gongshang Shibao (Commercial Times), November 30, 2003.



^{17.} According to the Ricardian Equivalence Hypothesis, bond-financed deficit must be met by a future tax increase, while interest and consumption will be unaffected by debt-financed government spending.

^{18.} See T. S. Yu, K. N. Sun, K. M. Chen, and S. W. Wang, *The Size and Structure of Government Expenditure in Taiwan over the Next Ten Years* (Taipei: Chung-Hua Institution for Economic Research, 1992).

generation of taxpayers is unable to vote on current government spending. This is also far too heavy a tax burden to foist upon members of the next generation as soon as they are born.

A growing budget deficit and ballooning public debt will weaken Taiwan's long-term economic prospects; indeed, it is clear that the already inflated budget deficit has made it difficult for the government to come up with any significant stimulus plan to promote economic growth.²⁰ Although Taiwan has immense levels of foreign reserves, this will not likely change the trend of a deepening budget deficit problem. The problem may be less severe than first thought; thus, it will take longer for Taiwan to reach the peak of its budget crisis. This gives rise to the question of what appropriate fiscal management measures the government should now be undertaking in order to reduce the mounting budgetary deficit. As recent events in Argentina and Japan have shown, fiscal frugality is necessary in order to extricate a country from its economic woes. Argentina went bankrupt because of fiscal extravagance in its overgenerous social security program, which in turn caused government spending to skyrocket, leading ultimately to a worsening budget deficit. And ever since the bursting of the bubble economy in Japan, most of the country's additional public expenditure has been financed by deficit; indeed, the Japanese government even allowed its budget deficit to exceed 7% of its GDP in 1999. Japan's subsequent attempts to adjust its fiscal and monetary policies have largely failed to improve the sluggish economy.

Unless there is a strong likelihood of Taiwan carrying out structural reforms in financial, banking, social welfare, and industrial sectors, there will be little chance of the island freeing itself from economic contraction anytime soon. The alternative is to repeat the bitter experience of Japan and allow the economy to slump into a prolonged period of stagnation. Thus, deeper reforms and more liberal policies may be the most appropriate measures for Taiwan to solve its budget deficit problems.

First of all, Taiwan must demonstrate fiscal discipline, with no increase in the debt ceiling before showing that it can achieve a balanced budget. Secondly, although Taiwan's outstanding debt is much lower than the 60% limit set forth by the Maastricht Treaty, the ratio of budget deficit to GDP must be controlled within an upper limit of 3%. Thirdly, there is a need to establish a sound tax system, with a reform of property taxes such as the land value tax (the holding cost of land) and the land value increment tax (cost of land transactions). The current rate of land value tax, at around 1%, is much too low, whereas the rate

^{20.} R. L. Chiu indicates that increases in Taiwanese government spending led to a significant decline in private consumption. See R. L. Chiu, "The Intratemporal Substitution between Government Spending and Private Consumption: Empirical Evidence from Taiwan," Asian Economic Journal 15:3 (September 2001), pp. 313-23.



of land value increment tax is too high. In order to make efficient use of land resources, the tax rate on holdings should be increased and the rate for land transitions reduced. Fourthly, there is a need to establish an equitable balance between central and local government budgets. There should be a system that allocates sufficient funds for redistribution to pay for the local government costs of compulsory education, law enforcement, fire services, basic infrastructure, and social welfare programs. Local governments will have to reduce their expenditure and seek out additional revenue sources. Finally, the scope of social welfare programs should be narrowed to provide benefits only to those in desperate need. Because the next generation is currently set to bear a tax burden that is far too heavy and thus fiscally immoral, Taiwanese leaders need to consider where the money to finance future public spending will come from. Both the ruling party and the opposition parties need to search their souls for an answer.

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