Market Access Charge (MAC)

Towards Accelerated Growth and a Balanced Budget

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Introduction

The MAC was developed to reduce U.S. trade deficits, stop the destruction of thousands of farms and factories, put millions of Americans to work at better wages, accelerate national economic growth, and end the accumulation of debts to foreigners.

For more than four decades, America has been importing more than it exports. It borrows from countries like China to pay them to make things that we could be making for ourselves. At the margin, we are paying for imports twice – once when we pay for the goods received, and again when we repay the loans used initially to pay for the imports.

As issuer of the world's default currency for international reserves and trade, America has been able to continue this Ponzi scheme far longer than anyone might have imagined. Seemingly without limit, we have been able to borrow money to cover not only our trade deficits, but also our government deficits. We could do this because we can repay old debts with new debts – primarily freshly-minted government and private sector securities. However, America is already facing the risk of what international bankers call a "sudden stop" – a sudden unwillingness of international creditors to continue lending to us at previous levels.[1]

Although the MAC was developed primarily to address "real" rather than fiscal problems such as debt repayments, if the MAC is implemented properly and in a timely manner, it can simultaneously help fix not only America's external balance and competitiveness problems, but also its fiscal deficits. Furthermore, it can strengthen Government's ability to invest in urgently needed education, infrastructure, advanced technology – especially green technology, and other services that will make America competitive again.

As shown by Table 1 below, the MAC will generate additional fiscal revenues in two ways:

1. **Revenues from the MAC charge**: The MAC, a charge *paid by foreign speculators* who want to exploit America's financial markets for personal profit, will generate revenues averaging about $460 billion per year between the time it is implemented and about five years later when the MAC is projected to have brought the U.S. trade deficit to zero.
2. **Revenues from a growing U.S. tax base**: The MAC will increase average GDP growth from the CBO-estimated rate of 3.7% to about 4.9% over the period 2019 to 2024 (Ferry/Byers, 2019), and the tax base will grow accordingly. Thus, even with no changes in tax ***rates,*** tax revenues will increase significantly.

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[1] Perhaps the most famous sudden stop in recent history was the South-East Asian Crisis of 1997. America needs to learn from this experience. In the 1990s, the region had enjoyed a boom financed largely by money borrowed from abroad. But when foreign creditors suddenly realized that many of the "investments" financed by this money were fictitious or had highly questionable returns, their herd instincts kicked in. They called in existing loans and refused to lend more, leaving countries like Indonesia virtually destitute. The more recent Eurozone Crisis also reflected a sudden stop of lending by countries like Germany to the southern periphery countries of the Eurozone like Greece, Italy, and Spain.

Many say a sudden stop like this can't happen here – that America can continue to borrow endlessly thanks to its reserve currency status and the "exorbitant privilege" of printing the money it needs to repay foreign loans. But we are closer to such a crisis than many realize. In fact, a sudden stop lay at the core of the Crash of 2008-2009 when credit from abroad fell by a third almost overnight (Fig. A1). Furthermore, another sudden stop may already be under way. Although the U.S. government deficit as a share of GDP has increased by nearly 50 percent since 2015, external financing dropped from 97 percent to about 83 percent of GDP between 2015 and 2018 (Fig. A2). Clearly, foreign lenders are becoming concerned about U.S. government closures, debt ceilings, continuing resolutions instead of budgets, and the actual or threatened down-ratings of USG debt in 2011, 2012, 2013, 2014 and 2019.

The MAC's Overall Fiscal Impact

Table 1 summarizes MAC's overall impact on the U.S. Government's fiscal position. As we had expected, revenues from the MAC charge itself will decline over time as the MAC dampens foreign capital inflows and thus the revenue base for the charge. The gradual decline also reflects the planned decline in the MAC charge rate as the trade deficit approaches zero towards the end of the projection period.

Table 1

Summary Impact of MAC Charge and MAC-Driven GDP Growth on Government Revenues

USD bls

Key Indicators	Base Year 2019	YR 1 2020	YR 2 2021	YR 3 2022	YR 4 2023	YR 5 2024	Avg. 2019-2024
Revenues - CBO Baseline	2,609	2,741	2,856	2,990	3,145	3,343	2,947
Revenues from MAC Charge	271	551	702	572	437	297	472
Revenues from MAC-Driven Growth	30	64	100	141	186	239	127
Total MAC Revenues Generated	*301*	*615*	*803*	*713*	*623*	*536*	599
CBO Forecast Interest (% GDP)	1.8%	2.1%	2.5%	2.5%	2.5%	2.5%	2.3%
MAC Revenues as percent of							
CBO Baseline Budget Revenues	12%	22%	28%	24%	20%	16%	20%
CBO Baseline Budget Deficit	34%	71%	88%	69%	62%	59%	64%
CBO Baseline GDP	1.4%	2.8%	3.6%	3.1%	2.6%	2.1%	2.6%
CBO Forecast Interest	80%	138%	144%	123%	104%	86%	112%
Memo							
MAC rates for this scenario (bp)	50	100	125	100	75	50	83

Sources: Tables 2 and 3, CBO

Furthermore, this table confirms that declines in direct MAC revenues will tend to be offset by increased revenues from the growing tax base stimulated by America's greatly-enhanced international competitiveness as the MAC moves the dollar to a strongly competitive exchange rate, thereby balancing America's foreign trade. In fact, by the end of the period, the rising revenues from a growing tax base will be roughly equal to the direct revenues generated by the MAC on the declining flow of "toxic waste" savings pouring into U.S. financial markets from foreign countries.

Over the projection period, the net effect of the MAC on U.S. Government revenues is quite impressive. Directly and indirectly, the MAC on average will generate additional revenues equal to about 20 percent of total revenues projected by the CBO. The additional revenue generated by the MAC would reduce the budget deficit by nearly two-thirds (63%) on average over the period, a reduction that would be even higher with less conservative assumptions than those used here.

For those concerned that the MAC will raise interest rates, thus worsening the government's fiscal position, there is very good news. First, research such as that by Warnock and Warnock (2009) indicate that eliminating foreign borrowing would raise interest rates by less than one percent – and probably well less than one percent given the very low yields in the world today. Second, the revenues generated by the MAC on average would more than cover *total* U.S. interest costs – interest on *all* U.S. borrowing!

In addition to the very substantial revenues that the MAC would generate – largely out of the pockets of foreign speculators, the MAC will also improve the U.S. Government's fiscal position by moderating the growth of "welfare" expenditures in areas such as family assistance, trade adjustment assistance, and corporate bailouts. This moderation will be possible because the MAC will accelerate U.S. economic growth, thereby generating jobs, higher wages, and healthier profits.

Methodological Notes

Table 1 is based on two more detailed tables. Table 2 estimates the additional revenues that can be expected from the MAC charge, and Table 3 estimates the additional revenues that can be expected from the expanded tax base that will be generated by the economic growth triggered by the MAC.

Table 2: Revenues from MAC Charge

Estimates of the revenues that would be generated by the MAC depend heavily on three parameters, all shown in Table 2 below:

a) Historical data on cross-border capital inflows from the Treasury International Capital (TIC) database maintained by the U.S. Treasury.

b) GDP growth as estimated, on the one hand, by the macro framework created by Jeff Ferry and Steven Byers (FB) of the Coalition for a Prosperous America (Ferry/Byers, 2019.02), and on the other, by the Congressional Budget Office (CBO, 2019.05)

c) The MAC charge rate.

Table 2
MAC - Additional Government Revenues from MAC Charges
(All values in USD billions except as noted.)

Variables	Base Year 2019	YR 1 2020	YR 2 2021	YR 3 2022	YR 4 2023	YR 5 2024	Avg 2019-24
Baseline Data[a]							
GDP - CBO (USD bls)	20,843	21,694	22,498	23,321	24,198	25,149	22,950
GDP Growth (CBO)	3.0%	4.1%	3.7%	3.7%	3.8%	3.9%	3.7%
	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
To	4.2%	5.3%	4.9%	4.9%	5.0%	5.1%	4.9%
GDP (FB) (USD bls)	21,086	22,200	23,289	24,420	25,631	26,946	23,929
Capital Flows							
KOUT-Capital Outflow[b]	53,967	55,069	56,089	57,114	58,188	59,332	56,626
KIN-Capital Inflow[c]	54,104	55,150	56,195	57,241	58,287	59,332	56,718
KINN- Net Capital Inflow[d]	300	240	180	120	60	0	150
% GDP (FB)	1.4%	1.1%	0.8%	0.5%	0.2%	0.0%	0.7%
MAC Rate (basis points)[e]	50	100	125	100	75	50	83
Revenue from MAC Charge (USD bls) [g]	**271**	**551**	**702**	**572**	**437**	**297**	**472**

Sources: BEA, FRED, FB, CBO, author's calculations

Footnotes:

[a] All references for baseline data are listed in the Bibliography.

[b] KOUT = Capital ("cash") Outflows, also known as "Gross Asset Sales by Foreigners to U.S. Residents" by the USTIC, and as "Net U.S. acquisition of financial assets excluding financial derivatives (net increase in assets / financial outflow (+))" by the BEA. KOUT is assumed to grow at half the speed of GDP because much KOUT is fed by KIN which is projected to fall relative to GDP.

[c] KIN = Capital ("cash") Inflows, also known as "Gross Asset Purchases by Foreigners from U.S. Residents" by the USTIC and as "Net U.S. incurrence of liabilities excluding financial derivatives (net increase in liabilities / financial inflow (+))" by the BEA. KIN is assumed to grow slower than KOUT so that the two converge by 2024. (Because the current account is projected to decline to zero by the end of the projection period, there should be no need for net capital inflows at that point; capital inflows should equal capital outflows with no change in reserves.)

[d] KINN = Net Capital Inflows. These are assumed to go to zero by 2024, consistent with balanced CAB in same year.

[e] Green-shaded cells are for user input and sensitivity testing. As presented here, the MAC rate is assumed to start at 50 bp, rise to 125 at half-way point, then drop back down to 50 bp. If current account was in balance at that point, the MAC could probably be

dropped to maintenance level of about 25 bp to offset continued excess demand for dollars and dollar-based assets as the result of the dollar remaining the world's default currency for international reserves and trade. As noted in the draft MAC law, the actual MAC rates would be set periodically on the basis of reviews by the Federal Reserve, much as the Fed resets the Fed Funds Rate periodically.

[f] The total growth rate equals CBO baseline growth plus impact of MAC on growth as calculated by Ferry-Byer.

[g] MAC would be charged on KIN - Gross Asset Purchases by Foreigners from U.S. Residents.

Cross-border capital inflows

The present paper benefited greatly from the availability of a dataset called "Foreign Purchases and Sales of Long-Term Domestic and Foreign Securities by Type" from the Treasury International Capital (TIC) database. These data are a big improvement over the data available when Jeff Ferry wrote his note on possible revenues from the MAC (Ferry, 2018). At that time, the only data available were on *stocks* of foreign holdings. Because the MAC is charged on flows, not stocks, he had to estimate turnover rates to get flows – an extremely challenging task in today's highly volatile, fast-moving financial markets.

Another challenge was to project the capital inflows into the future. Unfortunately, past flows do not show any dependable patterns – partly because of the sudden stop of capital inflows during the Crash of 2008 and the uneven recovery of flows since then. (See footnote above and Figures A1 and A2 in Annex A). It was tempting to use longer-term correlations from the past, but these would almost certainly have produced a major overestimate of the MAC revenues. As Figure A1 shows, capital inflows in the recent past grew dramatically faster than GDP grew, rising from 110% of GDP in 2000 to 260% in 2007-08 – an elasticity of 3.7! Given that the MAC is designed to *slow* U.S. borrowing from abroad, the results presented here are based on a highly conservative elasticity of 0.5 of foreign capital inflow growth relative to GDP growth.

MAC Charge Rate

We have agreed that it would be wrong for the MAC law to state, for example, that a current account deficit of 1 percent of GDP would warrant a MAC rate of 100 bp, or that a current account deficit of 1.5 percent of GDP would warrant a MAC rate of 150 bp. A formulaic approach like this would be tempting in terms of simplicity, predictability, automaticity, and depoliticization, but as Rob Scott demonstrated while we were drafting the MAC, doing so could lock in charges that could force under- or over-adjustment of the exchange rate. Furthermore, the Fed's experience shows that tools such as the Fed Funds rate – and thus the highly comparable MAC charge rate – need to be fine-tuned by experts on the basis of multiple factors.

The MAC charge rates used in the scenario presented here reflects the Fed's experience with the Fed Funds rate for moderating domestic demand for money, and the world's experience with the Taper Tantrum. This evidence indicates that a MAC charge rate in the range of 50 to 150 or even 200 basis points would probably be required to moderate foreign capital inflows to levels consistent with a fully competitive U.S. dollar and balanced U.S. trade. Furthermore, because excess global demand for dollars and dollar-based assets will not simply disappear, it may well be necessary to maintain a MAC of 25-50 bp to prevent the dollar from becoming bloated again, forcing the U.S. back into trade deficits, closed factories, and lost jobs. These factors explain the MAC charges shown in the green cells in Table 2.

Adjustments in the MAC rates entered in the green boxes are automatically reflected throughout the model, including in the summary table (Table 1). The current settings for the MAC rates may be on the low side – another case where this model's estimates are conservative and almost certainly understate the positive revenue impact of the MAC and thus its ability to reduce the Federal budget deficit and to provide the additional resources needed to meet America's pressing economic, social, and national security needs.

Table 3: Revenues from Increased Tax Base

This table is quite simple because it depends on only three variables, all of which are readily available:

(a) GDP growth without the MAC – based on CBO projections (CBO, 2019.05)

(b) GDP growth with the MAC – based on Ferry/Byers projections (FB, 2019.02.14)
(c) Tax revenues as a share of GDP – based on CBO projections (CBO, 2018.08)

As can be seen in Table 3 below, revenues from the increased tax base are calculated as the difference in the GDP without and with the MAC, multiplied by tax revenues as a share of GDP as projected by the CBO.

Table 3. Impact of Increased Tax Base Caused by MAC-Driven Growth on Government Revenues

(All values in USD billions except as noted.)

Variables	Base Year 2019	YR 1 2020	YR 2 2021	YR 3 2022	YR 4 2023	YR 5 2024
Baseline Data						
GDP (CBO)[a]	20,843	21,694	22,498	23,321	24,198	25,149
GDP Growth (CBO)[a]	3.0%	4.1%	3.7%	3.7%	3.8%	3.9%
MAC Impact on Growth	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
GDP Growth (FB)[a]	4.2%	5.3%	4.9%	4.9%	5.0%	5.1%
GDP (FB)	21,086	22,200	23,289	24,420	25,631	26,946
CBO Forecast Budget Deficit (USD bls)	894	865	908	1,029	999	914
CBO Forecast Revenues (USD bls)	2,609	2,741	2,856	2,990	3,145	3,343
CBO Revenues/GDP (%)	12.5%	12.6%	12.7%	12.8%	13.0%	13.3%
Incremental MAC-Induced GDP ($bls)	**243**	**506**	**791**	**1,099**	**1,434**	**1,798**
Inc.Revenue Produced ($ bls)[c]	**30**	**64**	**100**	**141**	**186**	**239**
Inc. Revenue/CBO Deficit Forecast	**3%**	**7%**	**11%**	**14%**	**19%**	**26%**

Sources: BEA, CBO, FRED, and FB[a]. For more details, see notes after Table 2.

Notes

a. CBO = 2018 Economic Outlook paper by CBO; FB = paper by Jeff Ferry and Steven Byers. References and links to each paper are given in note (a) to Table 3 below. Note: In light of recent developments, the 5% GDP growth shown in the CBO document for 2019 has been adjusted to 3%. Appropriate adjustments were accordingly made to all other numbers based directly or indirectly on the base-year estimated GDP.

b. Revenue figures are based on CBO estimates of revenues as share of GDP, applied to the FB GDP estimates that reflect the MAC's impact on growth.

c. Reflects additional taxes collected *at the existing rate* on the incremental GDP stimulated by the MAC.

Final Notes

Although this paper has drawn on the Ferry and the Ferry/Byers papers wherever possible, the baseline data in those papers and this will vary because (a) the Ferry/Byers paper did not address fiscal indicators, (b) this paper drew from CBO information that has been updated, and (c) the Ferry paper used capital flow data estimated from stock data, while this paper uses actual flow data from the USTIC.

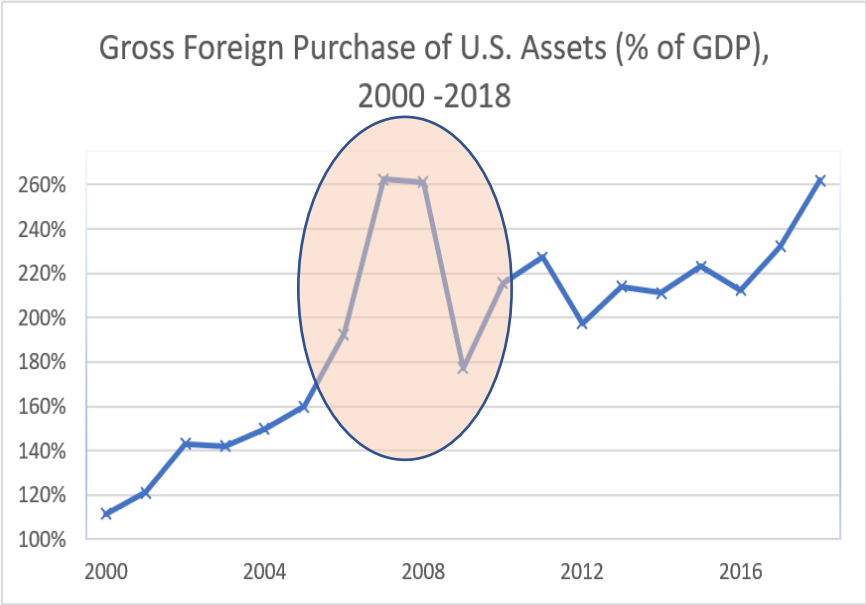
This paper makes a serious attempt to quantify the MAC's fiscal benefits. Nevertheless, more work is along the following lines would be warranted:

a) Integrate fiscal analysis directly into the REMI framework using USTIC flow data.
b) Get data on the purchase by foreigners of short-term as well as long-term U.S. securities (understanding, of course, that the MAC will not cover non-interest-bearing assets such as deposits in normal checking accounts).
c) Adjust gross MAC charge revenue calculations with a reasonable estimate of the fee that correspondent banks should be allowed to keep in exchange for capturing the MAC revenues and transmitting them electronically to the U.S. Treasury.

Annex A - Charts

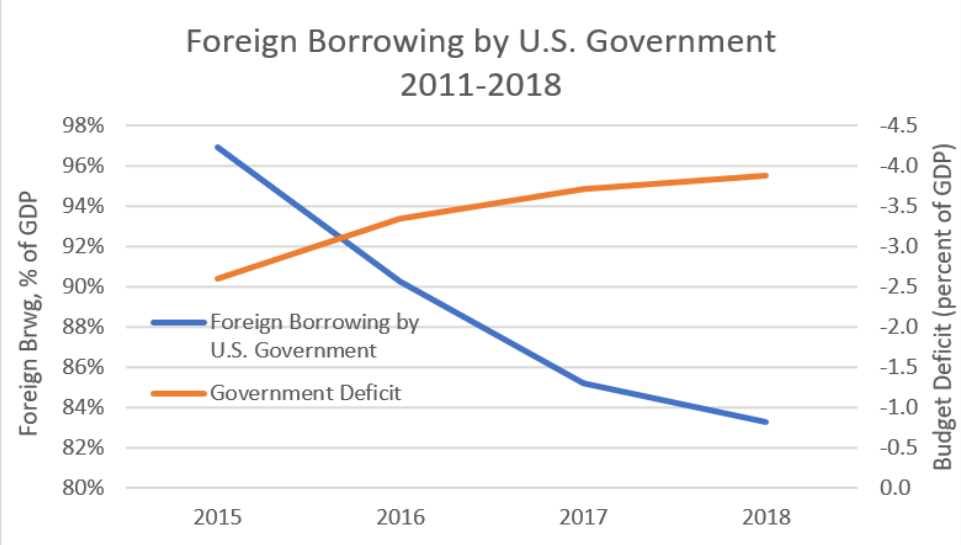
America's Sudden Stops of International Credit

Figure Al. America's Sudden Stop of International Credit, 2008-2009



Source: UST International Capital and FRED

Figure A2. Falling Foreign Demand for U.S. Government Debt, 2011-2018



Source: USTIC and BEA

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