MMT vs. Fiscal Expansion with Quantitative Easing

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1. MMT vs. Fiscal Expansion Coupled with Quantitative Easing

2. Cross-country Accommodation of Fiscal Expansion and Quantitative Easing by Expanding the Role of ADB
Modern Monetary Finance
vs.
Fiscal Expansion Coupled with Quantitative Easing
Dramatic expansion of fiscal spending

- Government expenditures of ADB member countries skyrocketed in the wake of COVID-19 pandemic, an unprecedented clinical and economic shock, which led to the largest contractions since the Great Depression.
MMT (Modern Monetary Finance)

- **Academia**
  - Developed in a small corner of academia
  - A country that issues its own currency can never run out and can never become insolvent in its own currency
  - Central banks can finance their spending using printing power. Fiscal deficit do neither increase interest rates nor crowd out private investment
  - As such, governments should try to achieve ‘full employment’ by government spending through money printing

- **Political Attention**
  - “…became famous only because some high-profile politicians—particularly Senator Bernie Sanders and Representative Alexandria Ocasio-Cortez drew attention….” (Mankiw, 2019)
Anti-MMT (Academicians)

- **Mankiw (2019)**
  - Newly printed money will end up in the reserves, on which the interest need to be paid by the government. Therefore, the statement that the money-financed deficit has zero-cost is false.
  - Assuming that this interest is not paid enough to achieve zero-cost, commercial bank will decrease the amount of reserve and increase lending. This will lead to increase in money supply, decrease in interest rate, thus rise in inflation. Also, unlike in the closed economy settings that the MMT theory is based on, in the open economy, collapse in exchange rate will magnify the inflation.
  - Inflation would depreciate the value of money that is held by the government, which offsets the revenue of money printing. Additionally, long-term interest rate, risk premiums, real wages, etc. will be influenced, which will consequently impact the real economy variables.

- **Summers (2019)**
  - Lawrence H. Summers tweeted “I am sorry to see the New York Times taking MMT seriously as an intellectual movement. It is the equivalence of publicizing fad diets, quack cancer cures or creationist theories.
Anti-MMT (Policy makers)

- **Federal Reserve**
  - Jerome Powell ripped proponents of MMT and threw cold water on the idea that the Federal Reserve would ever help out combating the impact of spiraling deficits by keeping interest rates low. He said “The idea that deficits don’t matter for countries that can borrow in their own currency I think is just wrong”

- **Bank of Japan**
  - Even though MMT economists have used Japan as an example of a country implementing MMT, Japanese officials and policymakers have firmly denied it
  - Finance Minister Taro Aso called MMT “an extreme idea and dangerous as it would weaken fiscal discipline” (Nikkei Asia 2019)
  - Bank of Japan (BOJ) policy board member Yutaka Harada said “the approach proposed by MMT will cause inflation for sure” (Nikkei Asia 2019)
  - BOJ Governor Haruhiko Kuroda stated, “Japan has deployed economic stimulus policies. But the government believes it’s important to restore fiscal health and make fiscal policy sustainable. … It’s wrong to say Japan is resorting to MMT” (Kihara 2019)
Government debt held by central banks: QE or MMT?

- Federal Reserve

- Bank of Japan
Quantitative Easing vs. MMT

- Fiscal expansion
  - Fiscal spending $\implies$ fiscal deficit $\implies$ Issuance of gov’t bonds↑
- Monetary expansion (particularly QE)
  - Money supply $\implies$ gov’t bond purchase ↑

<table>
<thead>
<tr>
<th>Fiscal expansion</th>
<th>CB’s bond purchase program</th>
<th>CB’s holding ratio of gov’t bonds</th>
<th>Interest rate</th>
<th>Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑</td>
<td>-</td>
<td>↓</td>
<td>↑</td>
<td>?</td>
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</table>

- How to distinguish the MMT from fiscal expansion coupled with QE?
  - The key difference lies in whether the fiscal expansion and CB’s government bond purchase are *a priori* separate and independent
  - Degree of independence of monetary policy: policy coordination on even political power vs. government’s dominance on central banks
  - Not easy to distinguish based on the policy output variables, which calls upon meticulous empirical investigation in academia
Cross-country Accommodation of Fiscal Expansion and Quantitative Easing by Expanding the Role of ADB
Cross-country MMT using ADB as an intermediary

- A fiscal expansion coupled with QE type of government bond purchase is highly likely to take place in the future given that the room for conventional interest rate policy may be limited since the potential growth rate falls in tandem with demographic trends.

- In particular, QE became a textbook recipe along with zero interest rate (ZIR) policy in dealing with negative economic shocks in many countries. In coping with economic recession, expansionary fiscal policy is also inevitable, albeit less likely to be aggressive. The combination of expansionary fiscal policy and QE has toxic components in two dimensions:
  - Since the Great Recession which was provoked by the financial crisis, this policy combination has not stimulated inflation, which is somewhat atypical. However, this policy combination has a strong potential of besieging economy by hyper-inflation.
  - It is also politically perilous. It may open the door to rampant populism by converting the policy combination to ‘de facto’ MMT.
  - To avoid these drawbacks, I propose a cross-country MMT using ADB as the intermediary. Of course, this is a purely academic proposal at this point. I hope that this will initiate discussion on how to combine fiscal policy and QE while mitigating its toxic nature BY enlarging the role of ADB as a regional central bank of central banks.
Case 1: A strawman case (de facto MMT)

- **Governments**: issue government bonds
  - Each country issues government bonds in its own currency, underlying component bonds in a pooled basket, which we call ‘collateralized bond pool (CBP).’ ADB constructs and underwrites CBP based on membership countries’ needs for issuing government bonds on a regular basis

- **ADB**: issue ADB$ bonds
  - ADB issues ADB$-denominated bonds (tentatively named currency issued by ADB). The total amount of its principal equals that of the CBP given the spot exchange rate between ADB$ and currencies comprising the CBP

- **Central banks**: Purchase ADB$ bonds and make fixed/fixed cross currency swap contracts with ADB
  - The central banks of countries that issued government bonds purchase the ADB bonds in proportion to the principal of their issued bonds in CBP. They swap the ADB bonds’ cash flows with those of their issued bonds in CBP using CCS (cross currency swap)

- **ADB**: purchase the CBP with local currencies acquired from CCS
  - ADB purchase the CBP with local currencies acquired from CCS
Case 1: A strawman proposal (de facto MMT)

### CFs of Gov’ts issuing bonds in CBP

<table>
<thead>
<tr>
<th></th>
<th>$M_a$</th>
<th>$-R_a$</th>
<th>$-R_a$</th>
<th>$-R_a$</th>
<th>...</th>
<th>$-(R_a+M_a)$</th>
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<tbody>
<tr>
<td>$M_b$</td>
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<td>$-R_b$</td>
<td>$-R_b$</td>
<td>$-R_b$</td>
<td>...</td>
<td>$-(R_b+M_b)$</td>
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### CFs of ADB

<table>
<thead>
<tr>
<th></th>
<th>$M_{ADB}$</th>
<th>$-R_{ADB}$</th>
<th>$-R_{ADB}$</th>
<th>$-R_{ADB}$</th>
<th>...</th>
<th>$-(R_{ADB}+M_{ADB})$</th>
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<tbody>
<tr>
<td>$M_a$</td>
<td>$-M_{ADB}$</td>
<td>$R_{ADB}$</td>
<td>$R_{ADB}$</td>
<td>$R_{ADB}$</td>
<td>...</td>
<td>$R_{ADB} +M_{ADB}$</td>
</tr>
<tr>
<td>$M_b$</td>
<td>$-R_b$</td>
<td>$-R_b$</td>
<td>$-R_b$</td>
<td>$-R_b$</td>
<td>...</td>
<td>$-(R_b+M_b)$</td>
</tr>
</tbody>
</table>

#### Issuance of ADB bonds

- CCS (lend ADB$ & borrow a and b currencies)

#### Buy CBP

- $-M_a$  $R_a$  $R_a$  $R_a$  ...  $R_a+M_a$
- $-M_b$  $R_b$  $R_b$  $R_b$  ...  $R_b+M_b$

\[ M_{ADB} = M_a \times \frac{1}{S_a} + M_b \times \frac{1}{S_b} \]

where

- \( S_a = \frac{1}{1ADB}$
- \( S_b = \frac{1}{1ADB$
Case 2: A partial hedge (partial MMT)

**CFs of Gov’ts issuing bonds in CBP**

\[
\begin{align*}
M_a &- R_a &- R_a &- R_a &\ldots &- (R_a + M_a) \\
M_b &- R_b &- R_b &- R_b &\ldots &- (R_b + M_b)
\end{align*}
\]

**CFs of ADB**

\[
\begin{align*}
M_{ADB} &- R_{ADB} &- R_{ADB} &- R_{ADB} &\ldots &- (R_{ADB} + M_{ADB}) \\
-wM_{ADB} & wR_{ADB} & wR_{ADB} & wR_{ADB} &\ldots & w(R_{ADB} + M_{ADB}) \\
wM_a & - wR_a & - wR_a & - wR_a &\ldots & - w(R_a + M_a) \\
wM_b & - wR_b & - wR_b & - wR_b &\ldots & - w(R_b + M_b) \\
-M_a & R_a & R_a & R_a &\ldots & R_a + M_a \\
-M_b & R_b & R_b & R_b &\ldots & R_b + M_b \\
\end{align*}
\]

\[
\begin{align*}
(1-w) \quad (1-w) \quad (1-w) \quad (1-w) \quad (1-w) \\
M_{ADB} & R_a + R_b & R_a + R_b & R_a + R_b &\ldots & R_a + R_b + M_a + M_b \\
-M_a - M_b & -R_{ADB} & -R_{ADB} & -R_{ADB} &\ldots & -R_{ADB} - M_{ADB}
\end{align*}
\]

\[
M_{ADB} = M_a \times \frac{1}{S_a} + M_b \times \frac{1}{S_b}
\]

where

\[
S_a = \frac{1}{ADB} \quad \text{and} \quad S_b = \frac{? b}{1ADB}
\]

**CFs of Central Banks**

\[
\begin{align*}
-M_{ADB} & R_{ADB} & R_{ADB} & R_{ADB} &\ldots & (R_{ADB} + M_{ADB}) \\
wM_{ADB} & - wR_{ADB} & - wR_{ADB} & - wR_{ADB} &\ldots & w(R_{ADB} + M_{ADB}) \\
-wM_a & wR_a & wR_a & wR_a &\ldots & w(R_a + M_a) \\
-wM_b & wR_b & wR_b & wR_b &\ldots & w(R_b + M_b) \\
(1-w)M_{ADB} & (1-w)R_{ADB} & (1-w)R_{ADB} & (1-w)R_{ADB} &\ldots & (1-w)(R_{ADB} + M_{ADB})
\end{align*}
\]

\[
\begin{align*}
-wM_a - wM_b & + wR_a + wR_b & + wR_a + wR_b & + wR_a + wR_b &\ldots & w(R_a + M_a) + w(R_b + M_b)
\end{align*}
\]

\[
\begin{align*}
& \iff \text{(1)Partially print money & buy their own government bonds} \\
& \text{(2)Partially buy ADB bonds from their FX reserves}
\end{align*}
\]
Other Variants

(1) From Case 2, a part of ADB bonds can be sold in the global capital market. By doing so, ADB$ can build its status as a currency representing pan-Asia.

(2) Each country can issue ADB-denominated bonds and ADB can pool them in a CBO (collateralized bond obligation). As such, default risk and related credit risk are an inherent risk component in the CBO. The equity tranche, the most risky tranche, can be purchased by central banks to enhance the marketability of CBO in the global market. Since high credit countries such as Japan and Korea are a part of this pool, it can increase the access of low credit emerging countries to the global capital market.

(3) And many others....
## Subscriptions to capital stock of ADB

<table>
<thead>
<tr>
<th>Year</th>
<th>AUS</th>
<th>BGD</th>
<th>CHN</th>
<th>IND</th>
<th>IDN</th>
<th>JPN</th>
<th>KOR</th>
<th>MYS</th>
<th>NZL</th>
<th>PAK</th>
<th>PHL</th>
<th>TWN</th>
<th>THA</th>
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<td>5.871</td>
<td>1.036</td>
<td>6.539</td>
<td>6.424</td>
<td>5.526</td>
<td>15.836</td>
<td>5.112</td>
<td>2.763</td>
<td>1.558</td>
<td>2.21</td>
<td>2.418</td>
<td>1.105</td>
<td>1.382</td>
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<td>2009</td>
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<td>5.862</td>
<td>5.76</td>
<td>4.955</td>
<td>14.198</td>
<td>4.583</td>
<td>2.477</td>
<td>1.397</td>
<td>5.945</td>
<td>2.168</td>
<td>0.991</td>
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<tr>
<td>2011</td>
<td>5.8</td>
<td>1.02</td>
<td>6.46</td>
<td>6.35</td>
<td>5.17</td>
<td>15.65</td>
<td>5.05</td>
<td>2.73</td>
<td>1.54</td>
<td>2.19</td>
<td>2.39</td>
<td>1.09</td>
<td>1.37</td>
</tr>
<tr>
<td>2012</td>
<td>5.79</td>
<td>1.02</td>
<td>6.44</td>
<td>6.33</td>
<td>5.44</td>
<td>15.61</td>
<td>5.04</td>
<td>2.72</td>
<td>1.54</td>
<td>2.18</td>
<td>2.38</td>
<td>1.09</td>
<td>1.36</td>
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<tr>
<td>2014</td>
<td>5.812</td>
<td>1.026</td>
<td>6.473</td>
<td>6.359</td>
<td>5.131</td>
<td>15.677</td>
<td>5.06</td>
<td>2.735</td>
<td>1.543</td>
<td>2.188</td>
<td>2.393</td>
<td>1.094</td>
<td>1.368</td>
</tr>
</tbody>
</table>
Time series behavior of the hypothetical ADB$

- Mean : -0.08%
- Median: -0.03%
- Standard Deviation : 2.62%
- VaR at 5% : -3.85%
- VaR at 95%: 5.07%
Thank you!