Do Imports Subtract from GDP? Teaching the GDP Expenditures Equation
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The Standard Textbook Approach is Misleading

\[ GDP = C + I + G + Nx \]
\[ GDP = C + I + G + (X - M) \]

The rational reader assumes: because imports are subtracted, the result is a decrease in GDP.

Example: I purchased an imported car for $30,000.
\[ GDP = C + I + G + (X - 30,000) \]
Conclusion: GDP is reduced by $30,000

But if GDP measures domestic production, purchasing an import should not reduce GDP.

Textbooks often don’t provide enough detail to guide students to a correct understanding.

Example:
“Note that U.S. imports contribute to the GDP of other nations—the locations where that value was produced—and we don’t want them to count twice; thus in GDP for the United States, we include U.S. exports but subtract U.S. imports.” (Tabarrok and Cowen, 3rd ed., p.499-500)

Three Teaching Recommendations

1. Decouple Nx so students see the variables as independent of each other. Use (X - M).

2. Teach “-M” as an Accounting Strategy Rather Than an Expenditure Variable
Subtracting imports (-M) is a corrective accounting measure since the value has already been added to one of the other domestic variables (C, I, or G).

Example: I purchased an imported car for $30,000 (added as “C” at purchase, subtracted as “M” for accounting):
\[ GDP = 30,000 + I + G + (X - 30,000) \]
Conclusion: Import has no impact on GDP

3. Introduce a Globalized Approach
Production of “domestic” goods often includes imported parts. So, a $30,000 domestically produced car that includes $15,000 in imported parts, increases GDP by $15,000. Using this nuanced approach can help students better understand how “global” products contribute to GDP.

More Information

The Textbook Treatment of Net Exports: Will the Uninformed Reader Understand? Journal of Economics Teaching

Active Learning Guide
The GDP Expenditures Equation: What Is GDP and How Do We Measure It?

Classroom-friendly Article
How Do Imports Affect GDP? (Page One Economics)

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https://www.stlouisfed.org/education/page-one-economics-classroom-edition/imports-gdp