

Growth Spillovers from the Global Economy to the Philippines

Manila

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Ola Melander

International Monetary Fund

(These are the views of the presenter and not those of the IMF, its Executive Board, or its Management)

Purpose

- Empirical estimation of spillover effects from global shocks to Philippine growth and transmission channels
- Focus on external growth shocks and shocks to global risk aversion
 1. How large are spillover effects?
 2. Which are the transmission channels ?

Definitions

- External growth = GDP growth rates of the United States, Euro Area, Japan and China weighted by their relative shares of Philippine exports
- Global risk aversion = VIX index

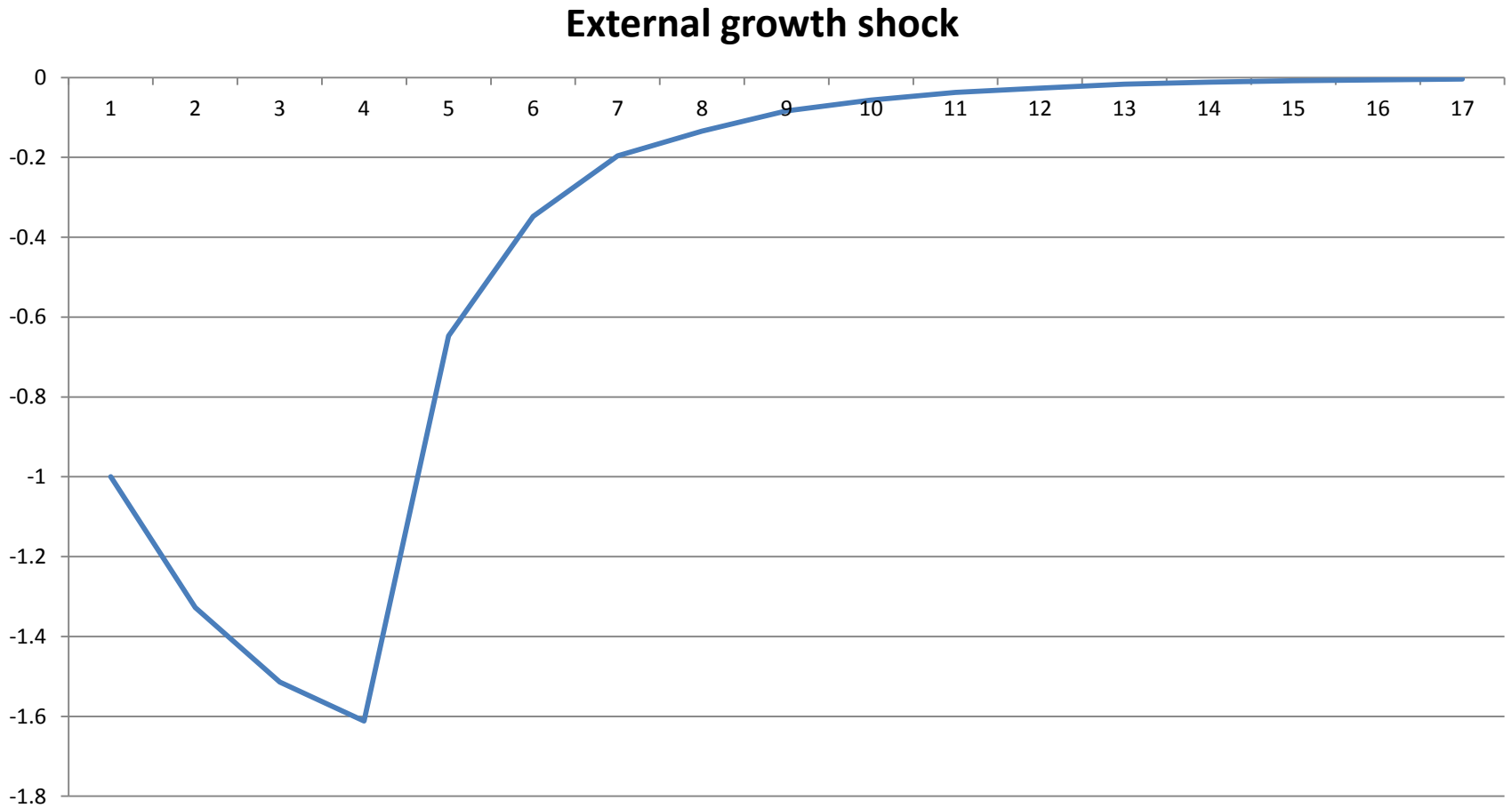
Methodology

- Bayesian VAR model by Villani (2009)
- Cholesky decomposition
- Variable ordering: external growth, VIX, capital flows, remittances, exports, consumption, fixed investment, growth
- Steady-state values informed by historical averages

External growth shock

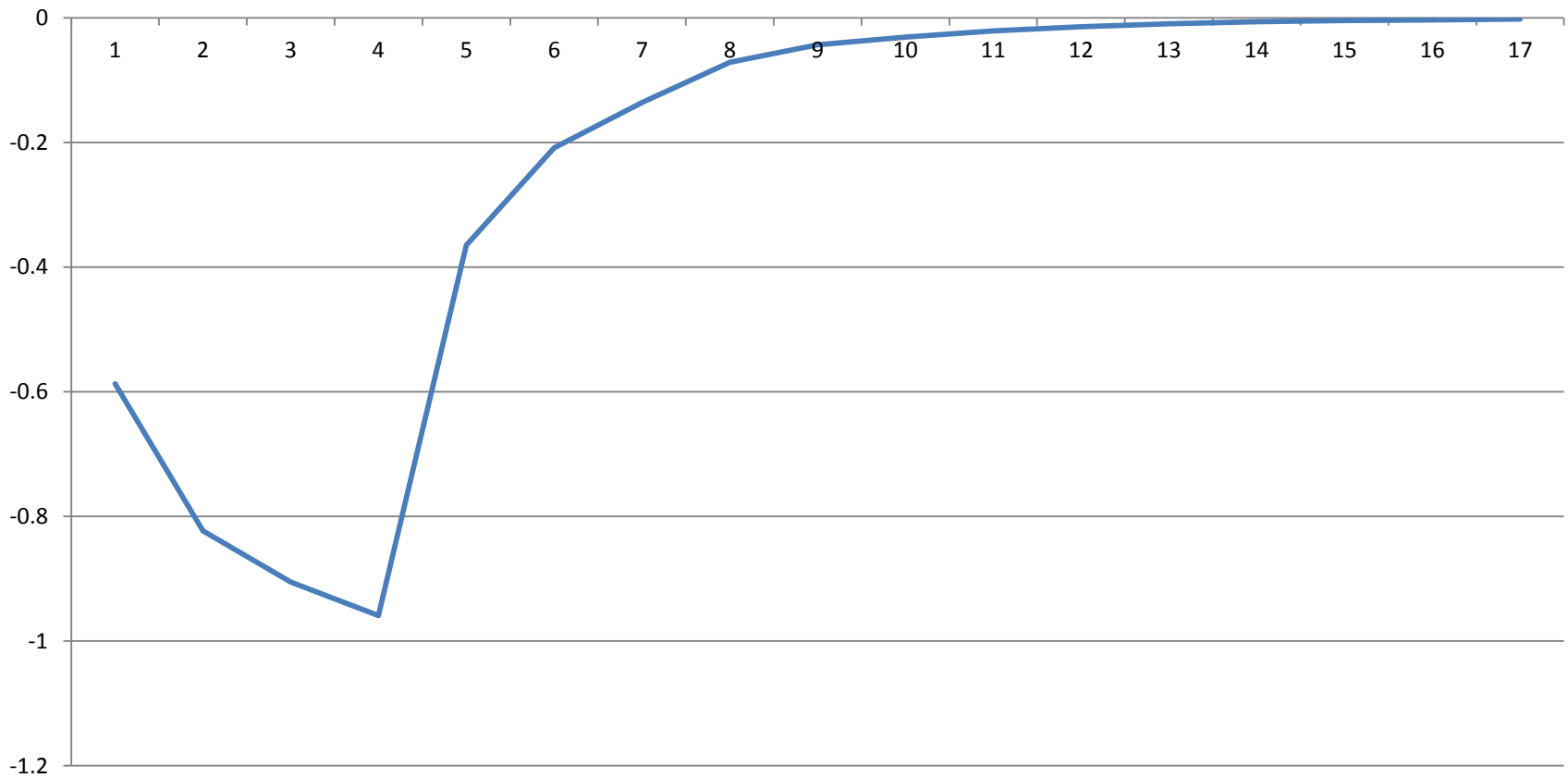
- Impact on growth
- Transmission channels

External growth shock



Impact of external growth shock

Impulse response of growth to external growth shock

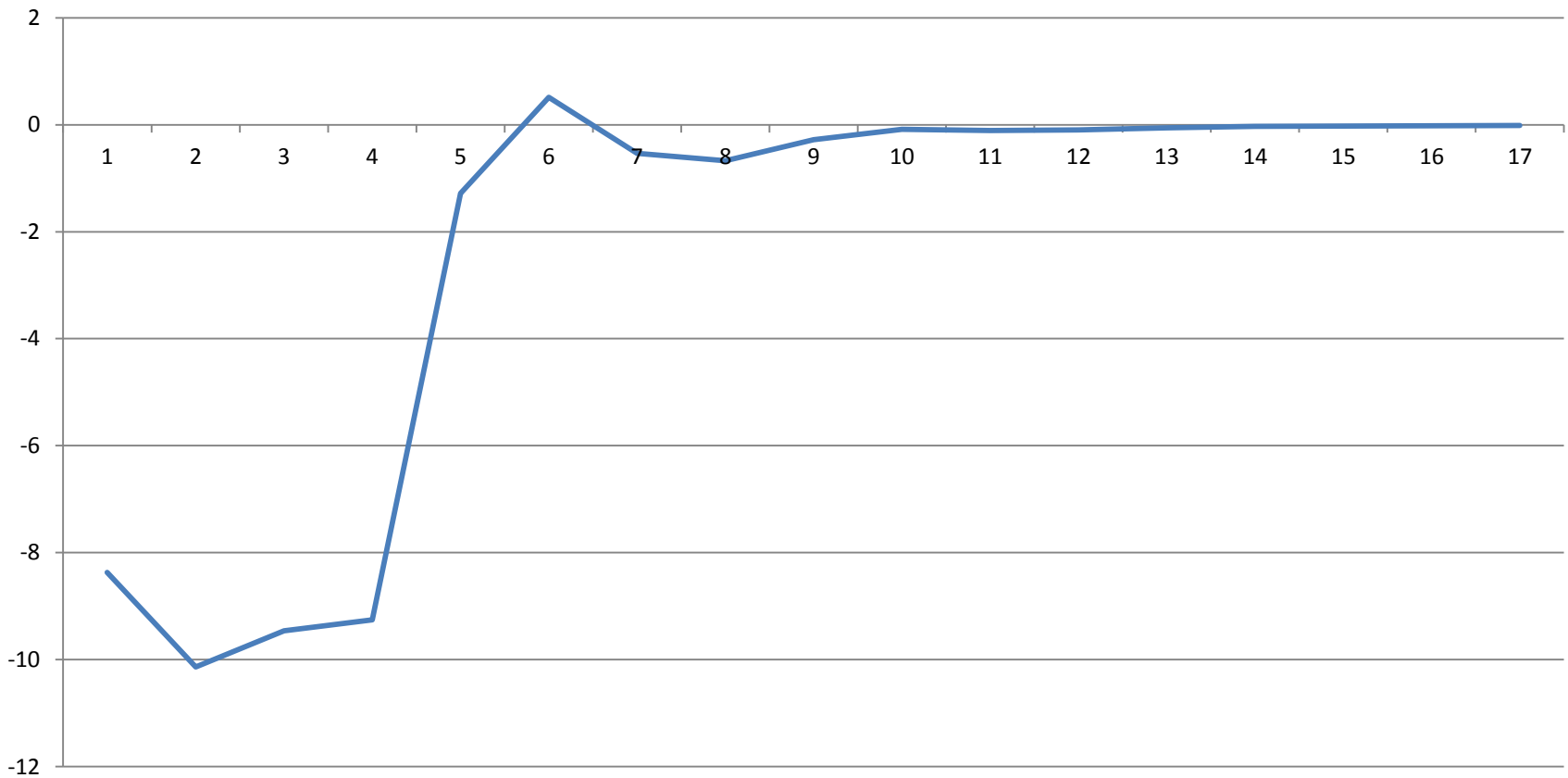


Transmission channels of external growth shock

- Mainly exports
- Also remittances

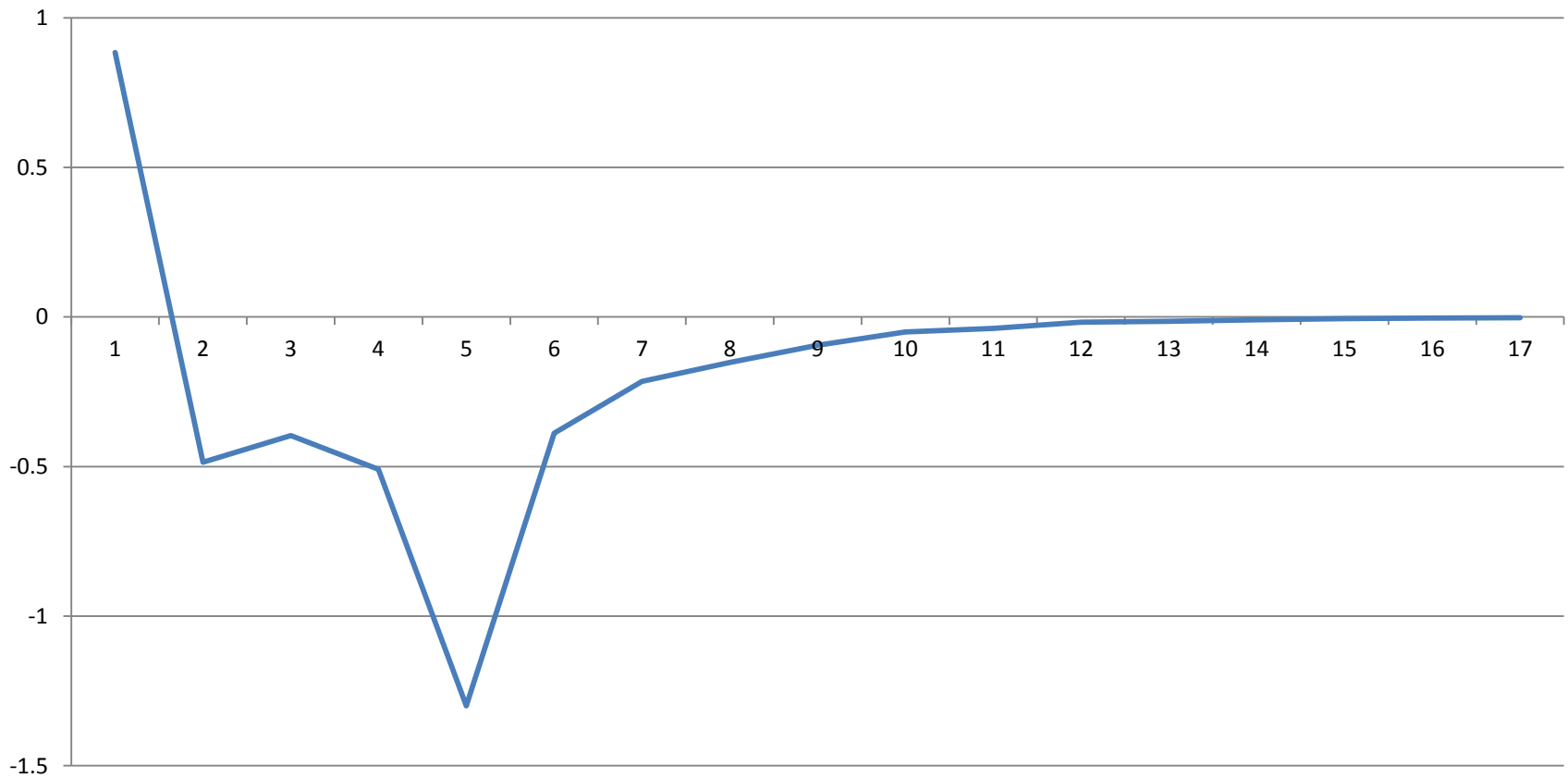
Transmission of external growth shock through exports

Impulse response of exports to external growth shock



Transmission of external growth shock through remittances

Impulse response of remittances to external growth shock

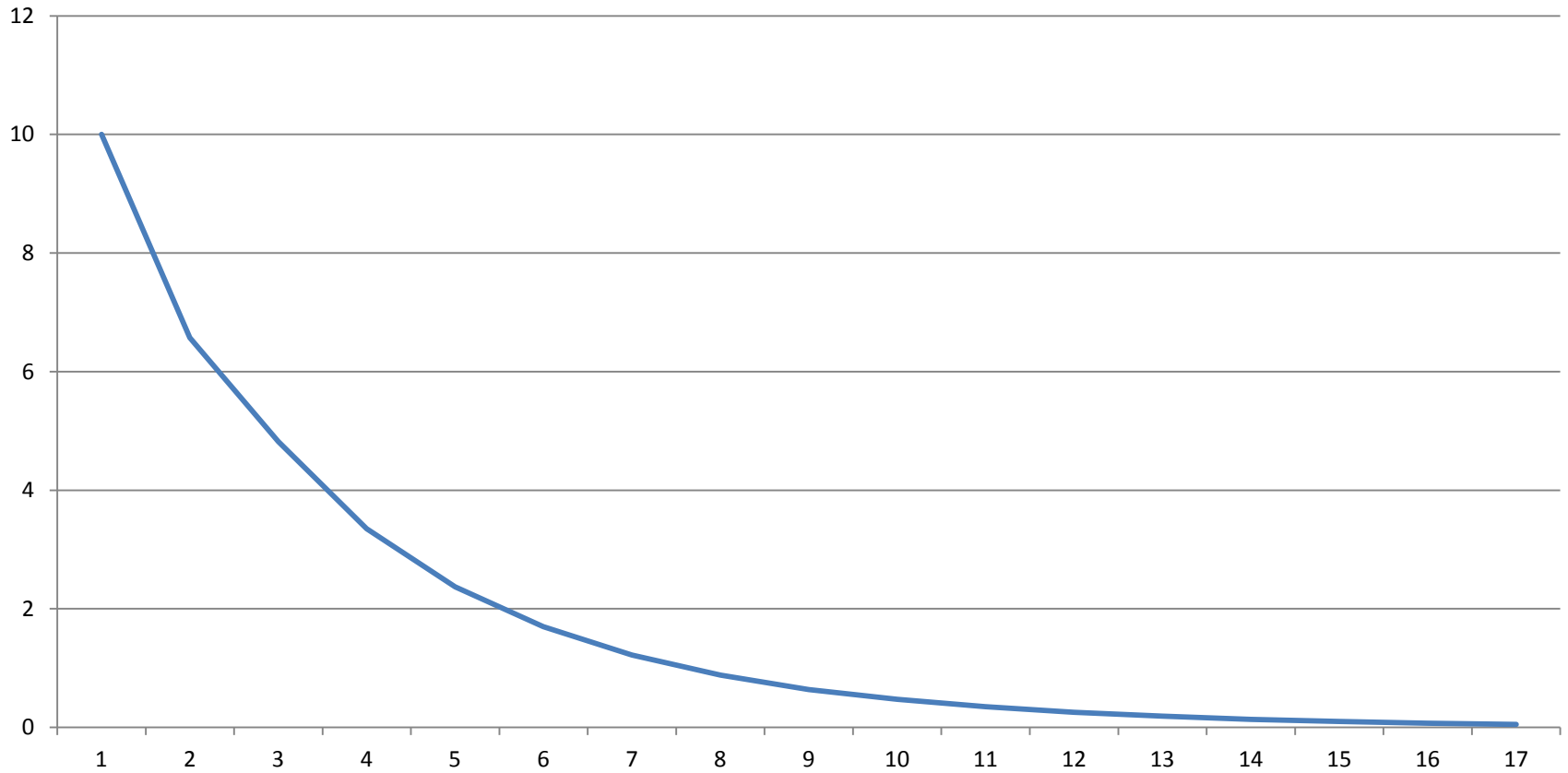


Global risk aversion shock

- Impact on growth
- Transmission channels

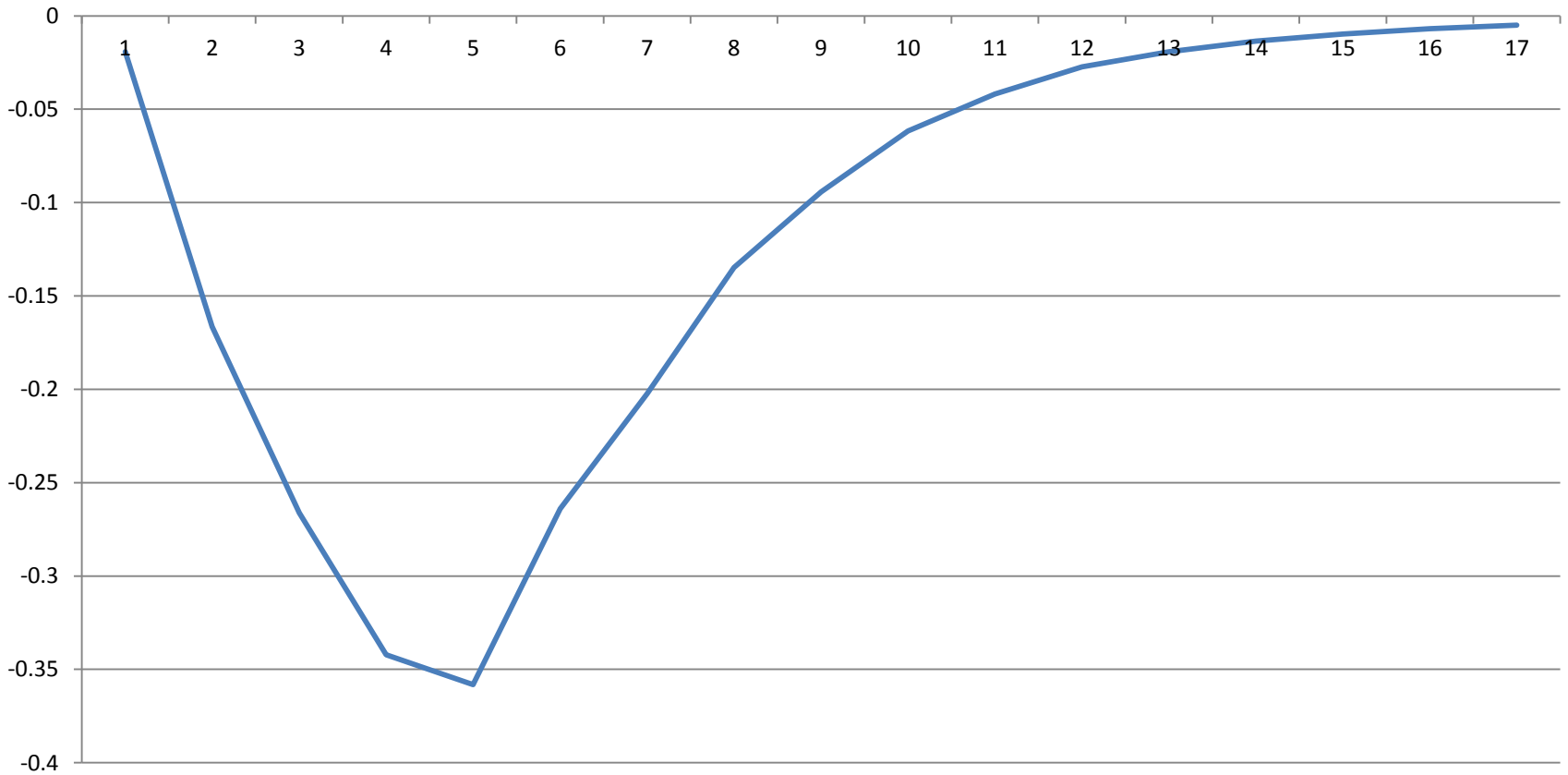
Global risk aversion shock

Global risk aversion shock



Impact of global risk aversion shock

Impulse response of growth to global risk aversion shock

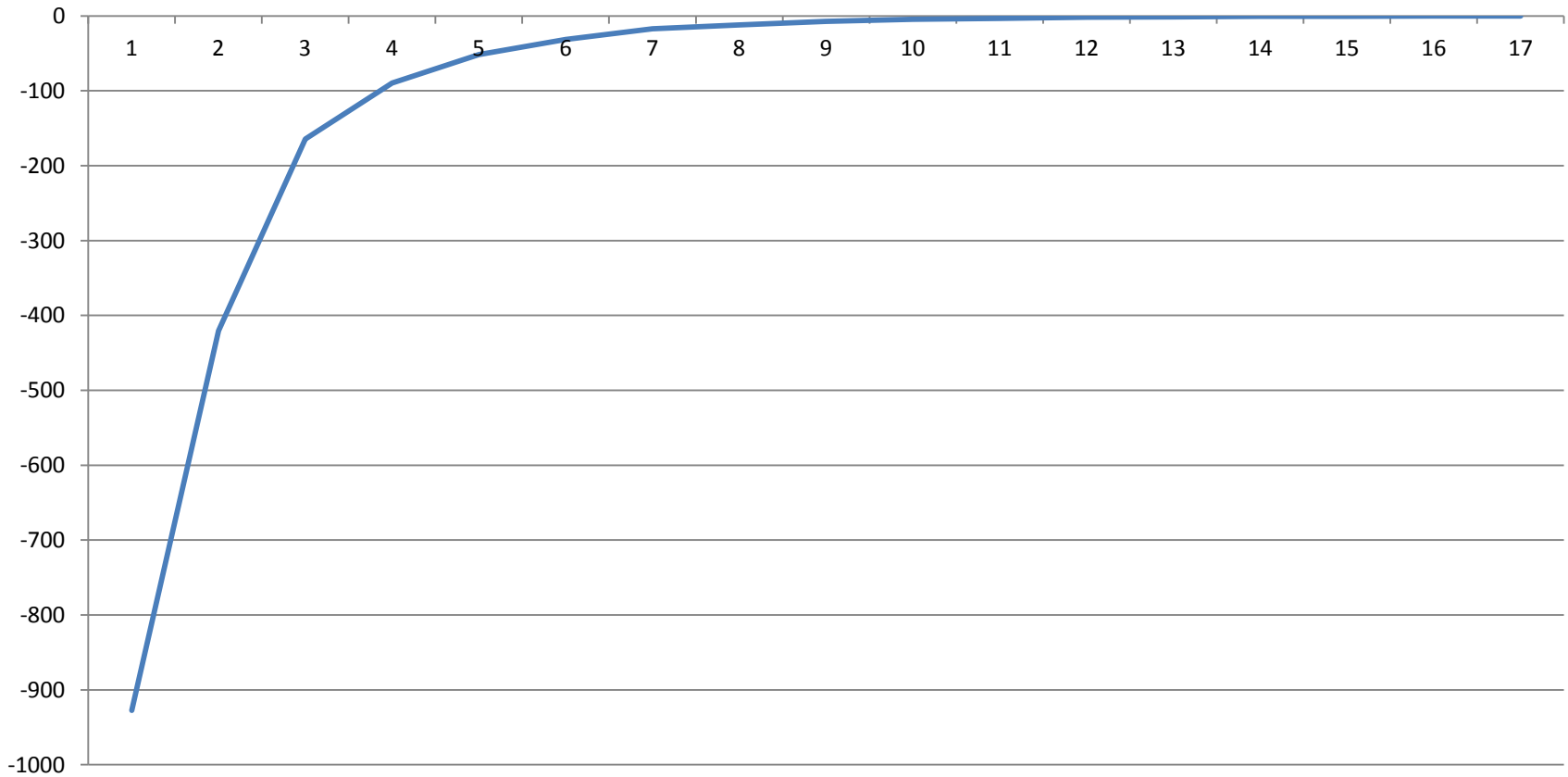


Transmission channels of global risk aversion shock

- Mainly capital flows
- Also remittances

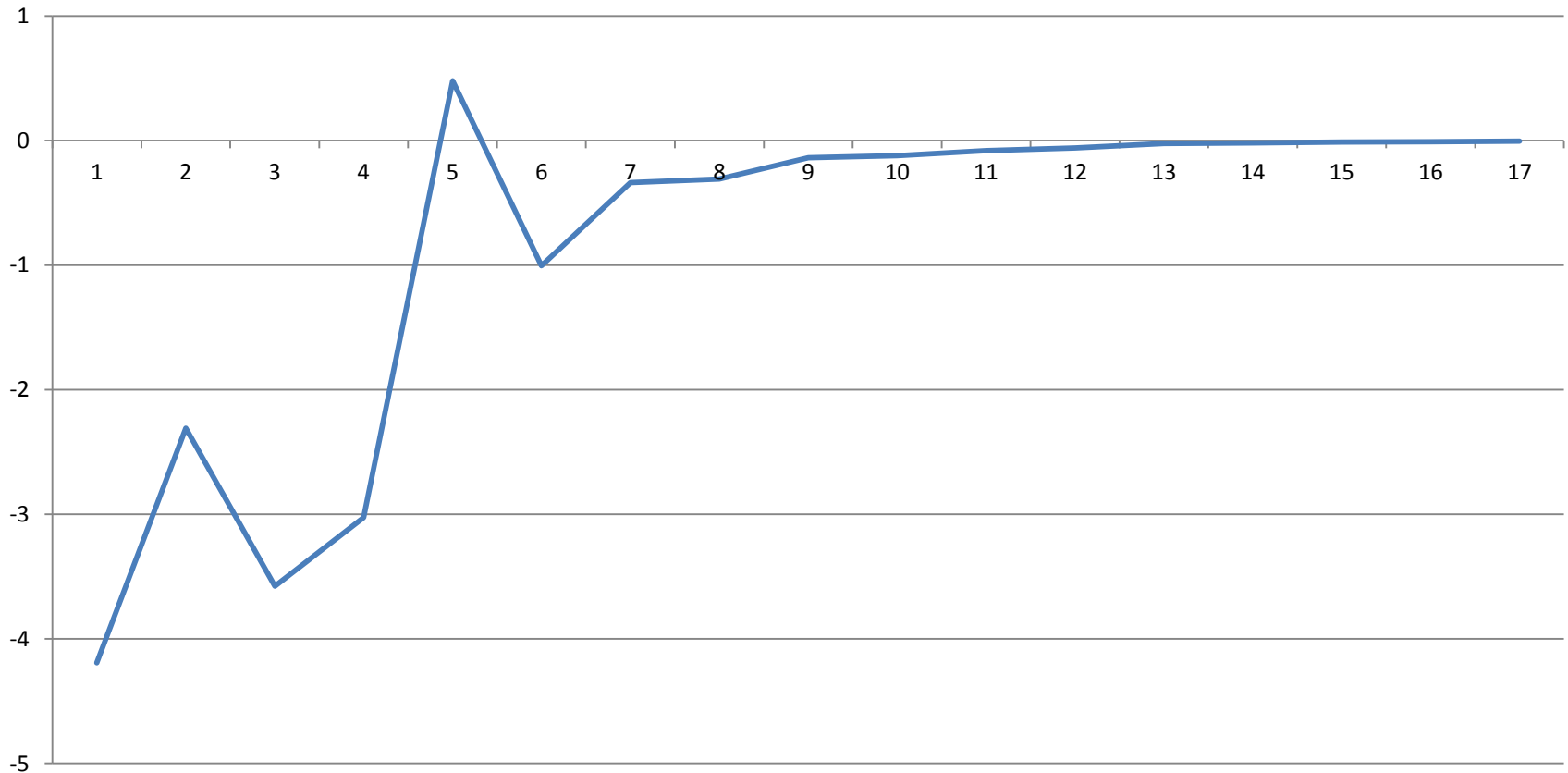
Transmission of global risk aversion shock through capital flows

Impulse response of capital flows to global risk aversion shock



Transmission of global risk aversion shock through remittances

Impulse response of remittances to global risk aversion shock

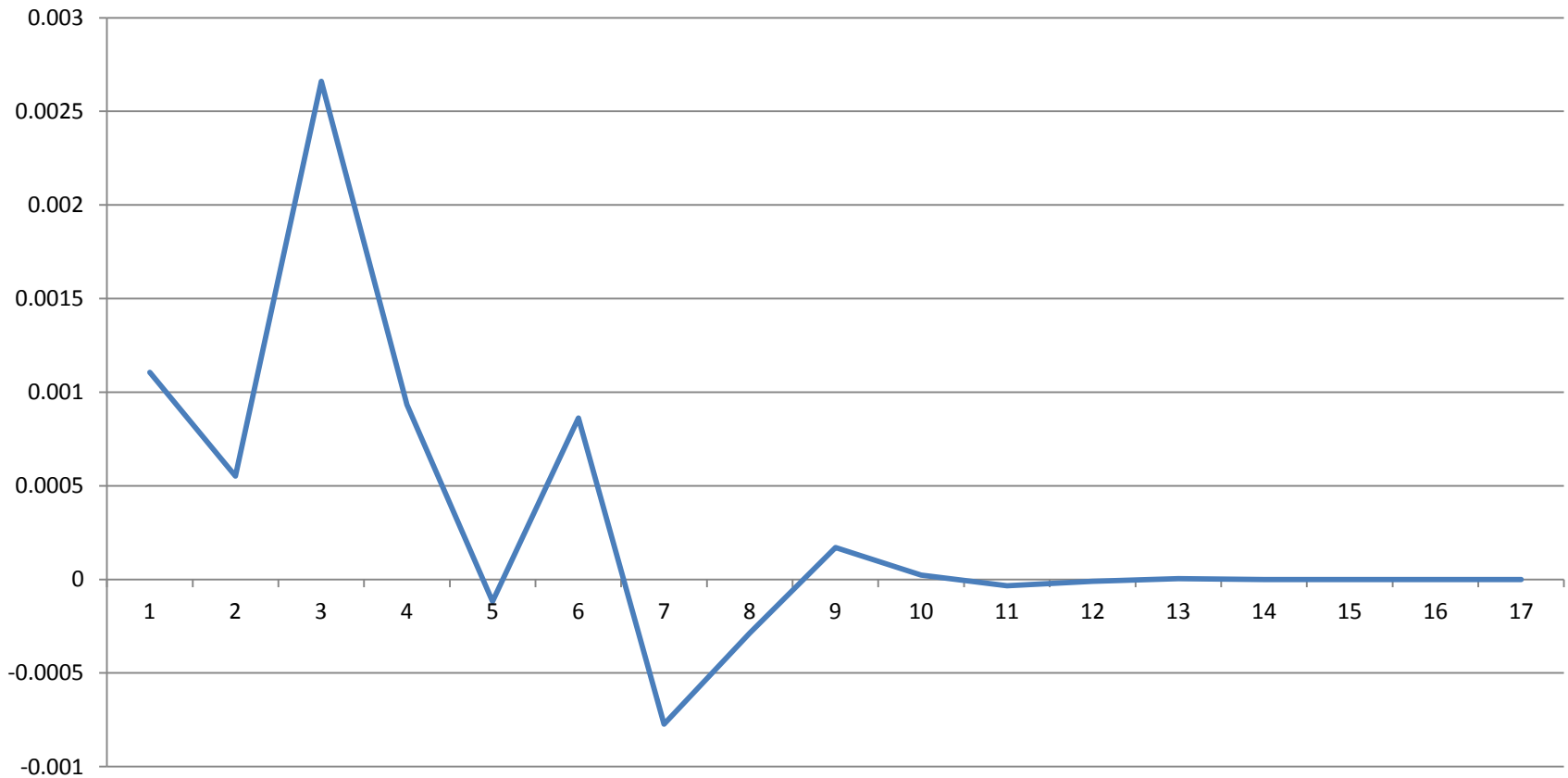


Impact of external developments on domestic demand

- How do exports, capital flows, and remittances affect consumption and fixed investment?

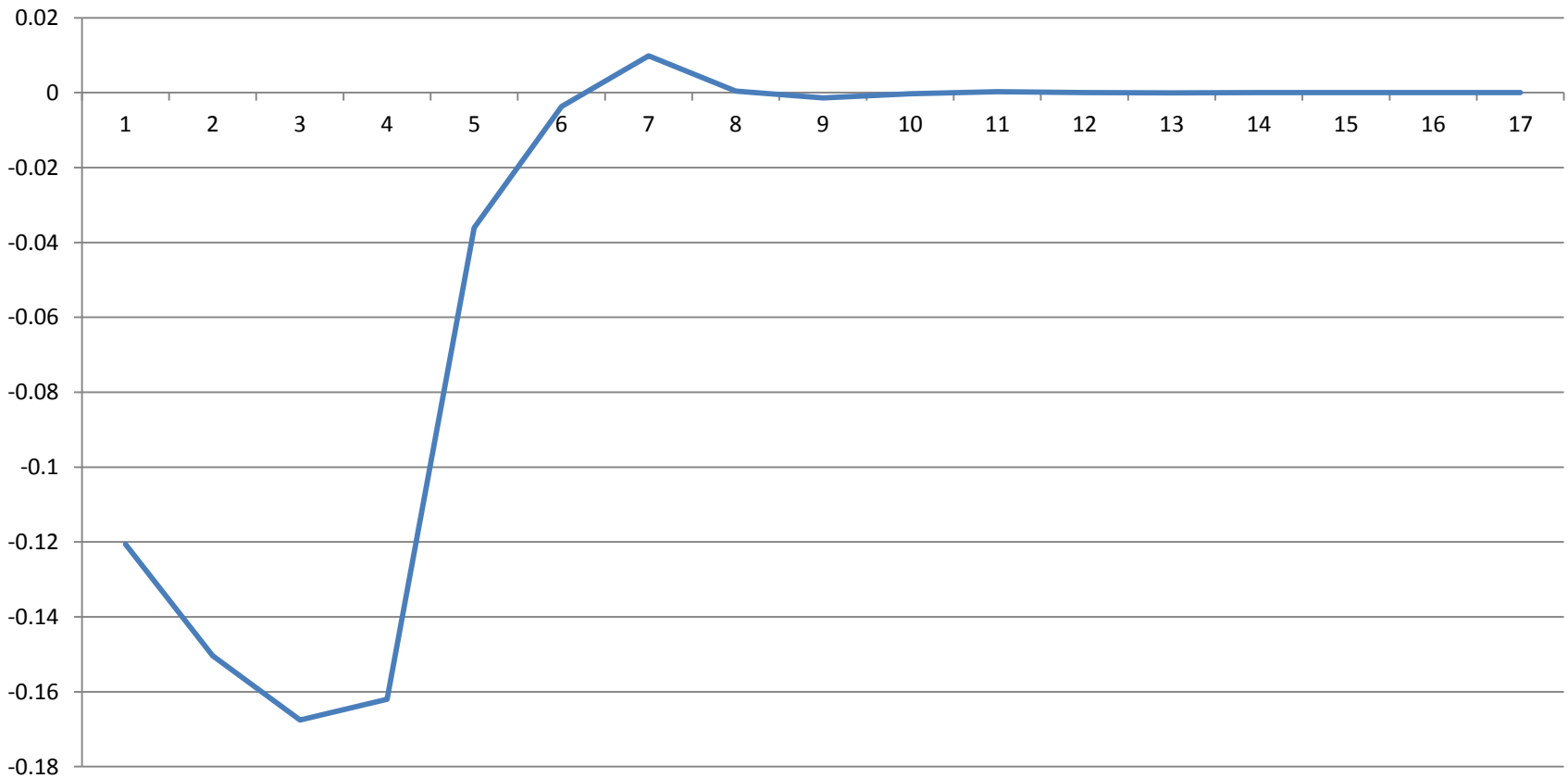
Impact of exports on consumption

Impulse response of consumption to exports shock



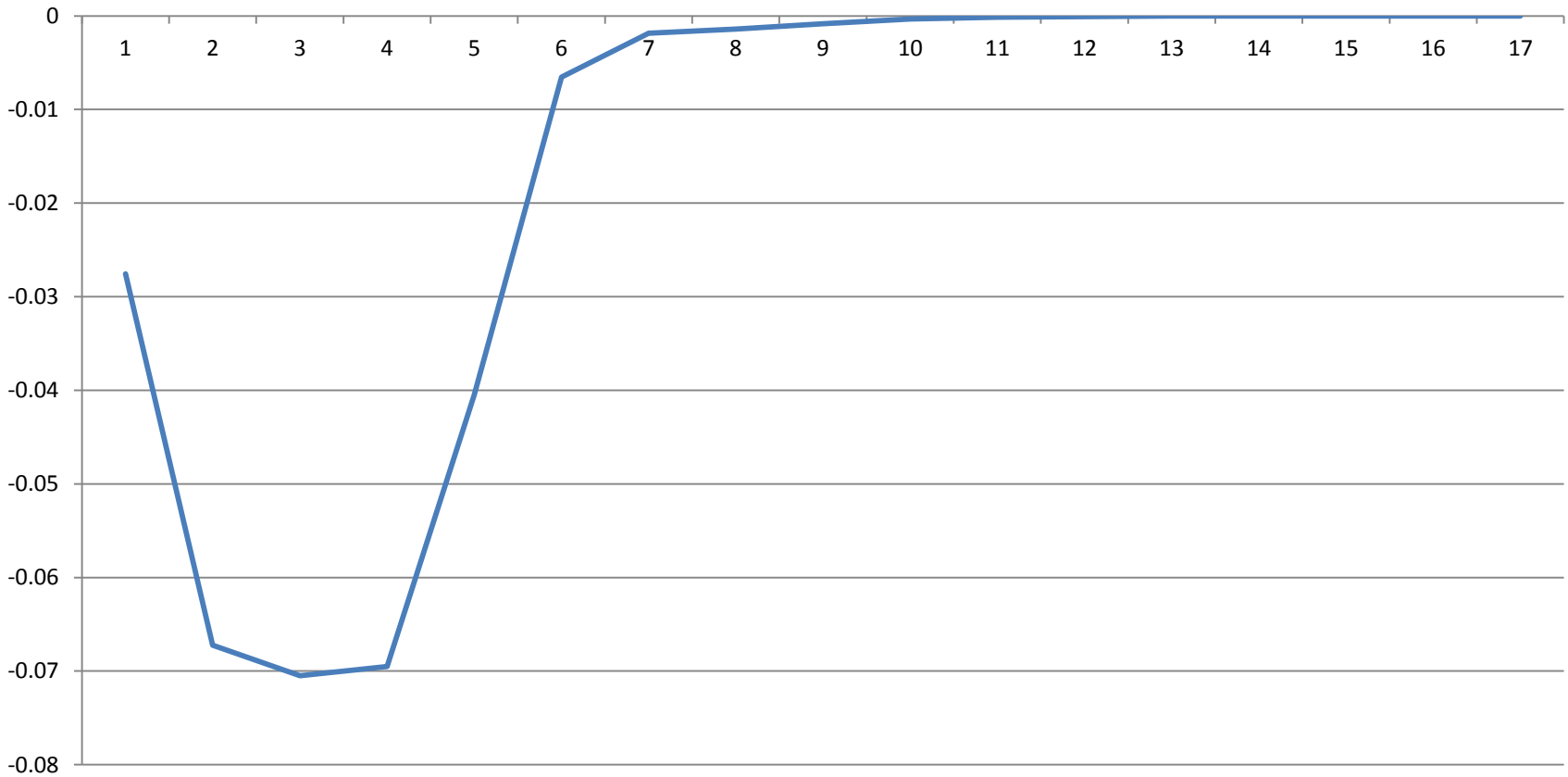
Impact of exports on fixed investment

Impulse response of fixed investment to exports shock



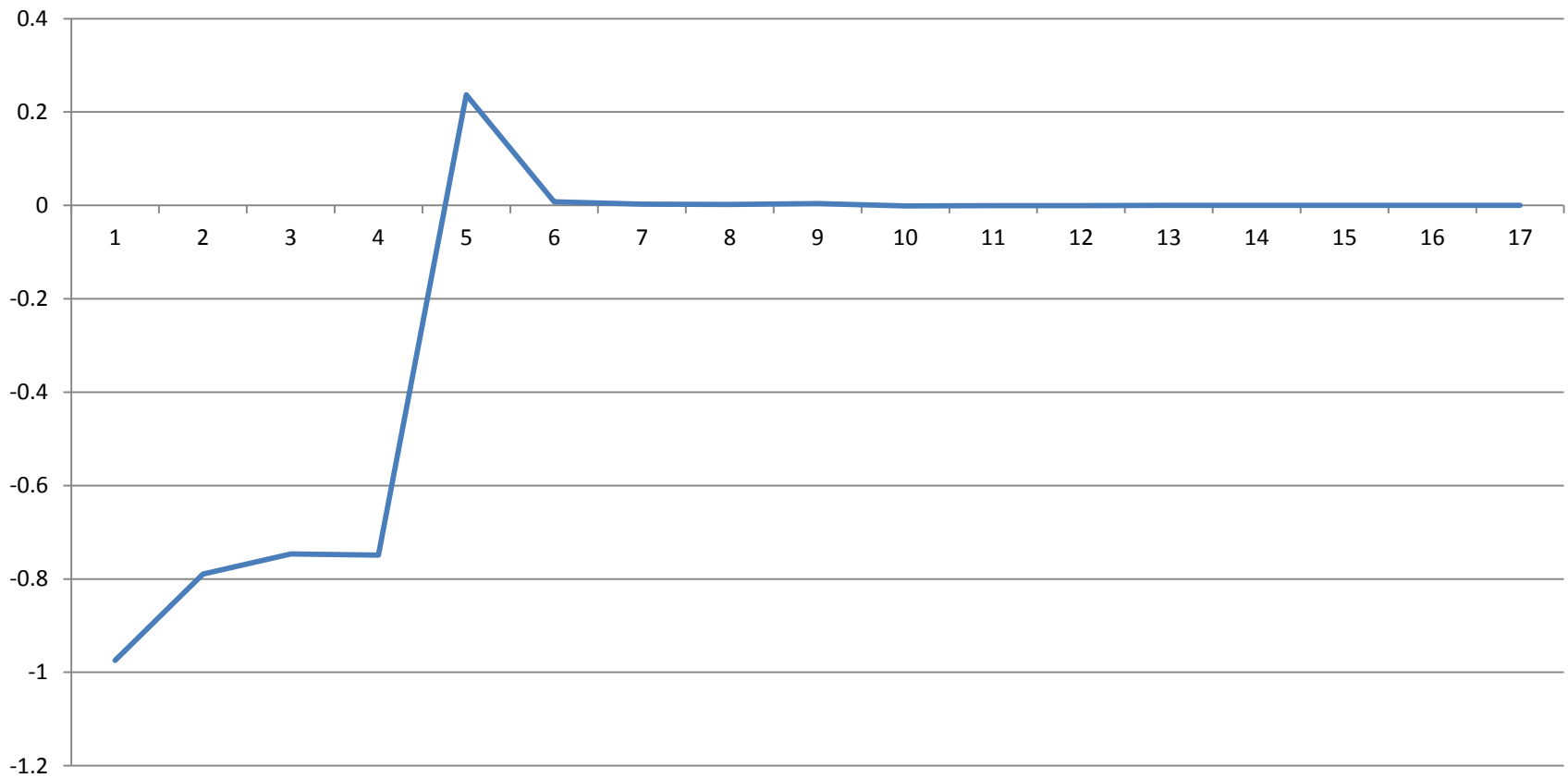
Impact of capital flows on consumption

Impulse response of capital flows shock on consumption



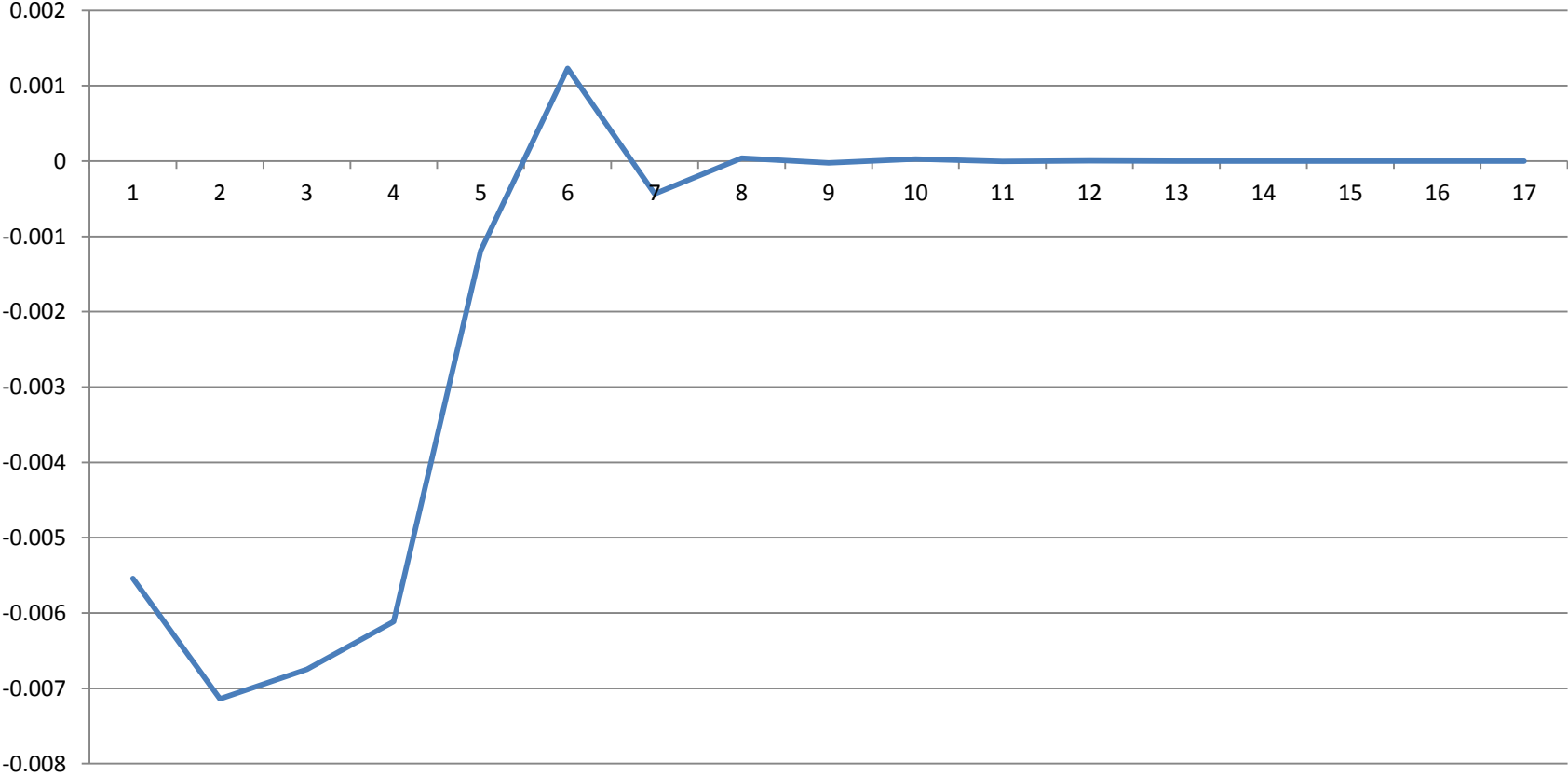
Impact of capital flows on fixed investment

Impulse response of fixed investment to capital flows shock



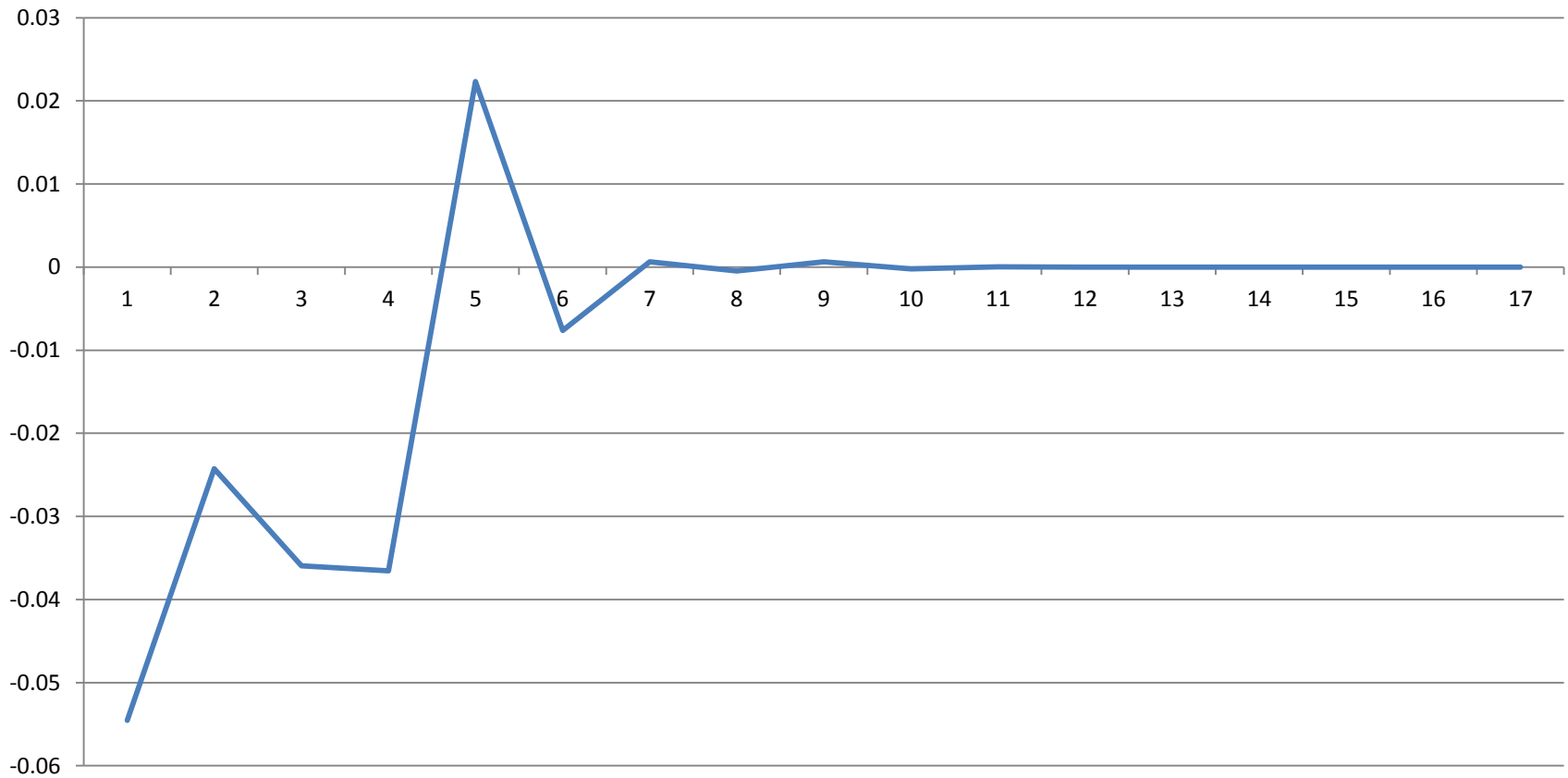
Impact of remittances on consumption

Impulse response of consumption to remittances shock



Impact of remittances on fixed investment

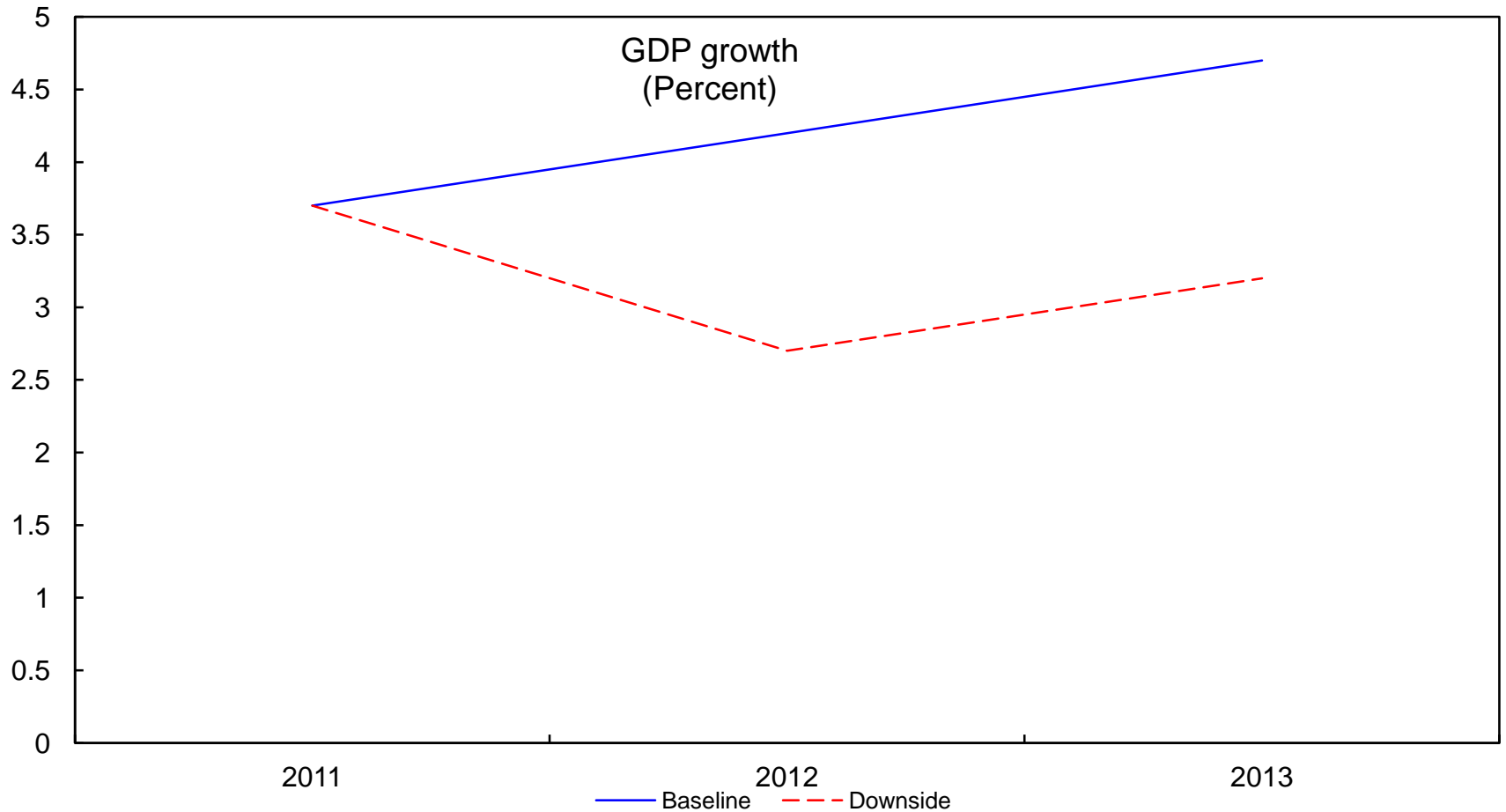
Impulse response of fixed investment to remittances shock



Downside scenario for global economy

- Following downside scenario in IMF's October 2011 Asia and Pacific Regional Economic Outlook
- Assumes a decline in Euro Area growth by 3.5 percentage points and a decline in US growth by 1 percentage point for two years
- Causes lower growth in Japan and China by 1-2 and 3-4 percentage points, respectively (estimated using the IMF's Global Integrated Monetary and Financial model)
- The total impact on external growth weighted by relative shares of Philippine exports is about 2-2.5 percentage points per year

Estimated impact on Philippine growth before any policy response



Summary

- A decline in external growth shock by 1 percentage point lowers Philippine growth by about 2/3 of a percentage point
- An adverse global risk aversion shock represented by a 10-point increase in the VIX causes Philippine growth to decline by about 1/3 of a percentage point
- External growth shocks are mainly transmitted through exports and remittances
- Global risk aversion shocks are mainly transmitted through capital flows and remittances
- External developments have a larger effect on fixed investment than on consumption
- In a downside global scenario Philippine growth could decline by about 1.5 percentage points relative to baseline

Maraming salamat sa inyo!