



Economic and distributional impacts of fuel price subsidy changes in Mongolia

By Ragchaasuren Galindev, Tsolmon Baatarzorig, Nyambaatar Batbayar, Delgermaa Begz, Unurjargal Davaa, Oyunzul Tserendorj

Key messages

- The impact of increasing global fuel prices on the Mongolian economy varies significantly depending on the government's choice of intervention.
- Without an intervention, poverty will become deeper and more severe.
- Subsidising domestic fuel prices and financing the deficit through foreign borrowing would allow production and employment to remain stable.

Background

Mongolia imports 100% of its domestic demand for refined petroleum products (gasoline, diesel etc.), with 95% of imports coming from Russia. Mongolia's economy is, therefore, highly dependent on global fuel prices, particularly Russian prices. Additionally, Mongolian consumption of petroleum products has been increasing for over a decade. Fuel is particularly important in Mongolia's land and water transport services as well as in the metal ore mining industry.

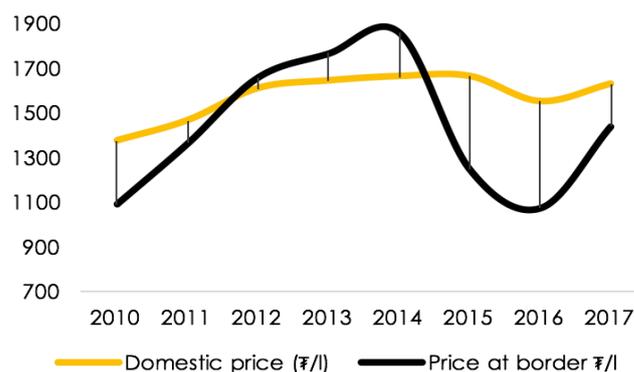
Global fuel prices have fluctuated significantly in recent years. However, domestic prices have fluctuated relatively less thanks to government interventions that mitigate the impact of global fluctuations by managing the excise taxes on fuel.

When global fuel prices increased considerably between 2012 and 2014, the government decreased excise taxes and provided subsidies to finance the losses of fuel importers, stabilizing domestic prices. In 2017, the government increased excise taxes on fuel to comply with the terms of fiscal consolidation under the IMF's Extended Fund Facility (EFF) program. Continued increases in global oil prices have made it difficult for the government to maintain stable domestic prices during fiscal consolidation.

A team of local researchers examined how an increase in the import prices of fuel is likely to impact the Mongolian economy under different price subsidy policies.



Domestic price vs price at border on autogasoline (2010-2017)



The analysis

The research team used a static Computable General Equilibrium (CGE) model calibrated to the 2014 Mongolian Social Accounting Matrix (SAM) to simulate three policy scenarios:

Scenario 1: Import prices of fuel increase by 15% (based on crude oil price forecasts). There is no government intervention.

Scenario 2: Import prices of fuel increase by 15% and the government decreased excise taxes on fuel to help keep domestic prices stable.

Scenario 3: As in Scenario 2, but the government intervention is financed through loans available under the EFF program while maintaining the same budget deficit.

The team also analyzed the impact of these scenarios at the household level using data from the 2014 Household Socio-Economic Survey. Per capita expenditure of all households was compared to the official poverty line reported by the National Statistical Office in 2014.

Key findings

The impact on the economy and Mongolian households varies significantly depending on the government's choice of intervention.

Scenario 1

Higher import prices of fuel have a negative impact on many macroeconomic indicators including private consumption, investment and net exports.

GDP at market price falls by 2.6%. Production and employment decline in most sectors, leading to a decrease in household income and household consumption of almost all commodities falls. Poverty would increase (1.2 percentage points) and become deeper and more severe. Government savings decrease as government income from taxation on household income, production, and products falls.

Scenario 2

As the government maintains domestic fuel prices of imported fuel using implicit subsidies, its budget deficit increases. This creates a crowding out effect in the capital market, decreasing total investment. It is also the main source of negative impacts on macroeconomic indicators (similar to those in Scenario 1).

Lower investment reduces demand for major investment goods and services, such as livestock, textile, and transport equipment. The sectors producing these goods then tend to reduce their labour demand, consumption of intermediate inputs, and prices.

Production and employment decline in most sectors, leading to a decrease in household income and household consumption of almost all commodities falls.

However, by subsidizing the price of fuel, the government could reduce the harsh impact on household poverty seen in Scenario 1.

Scenario 3

Production and employment remain generally stable, as do household income and consumption of all commodities.

However, the government's implicit subsidies on fuel means that government revenue from indirect taxation decreases and GDP at market prices falls.

Government savings decrease sharply but as this deficit is financed by foreign borrowing there is no crowding out effect on investment.

Additionally, the negative impact on poverty (seen in Scenario 1) could be eliminated under this policy.

Conclusions and implications for policy

The results of this analysis indicate that the domestic impact of an increase in global fuel prices can be managed through policy.

To avoid negative impacts throughout the economy, the government should **take measures to protect fuel consumers from international fuel price fluctuations.**

The best option to protect households, employment, and production from the negative shock of increased imported fuel prices, while respecting the terms of fiscal consolidation, is to **subsidize domestic fuel prices through decreased excise taxes and finance the resulting budget deficit through foreign borrowing.**

If minimizing budget deficit is the priority, the government should not modify fuel excise taxes. However, this option has a negative impact on economic activity and household purchasing power.



This brief summarizes outcomes from [MPIA-19906](#), an institutionalization project supported under the second phase of the PAGE initiative (2016-2020).

PAGE is a global research and capacity-building initiative for Policy Analysis on Growth and Employment in developing countries. PAGE is supported by the Department for International Development (DfID) of the United Kingdom (or UK Aid) and the International Development Research Centre (IDRC) of Canada.

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of PEP.