

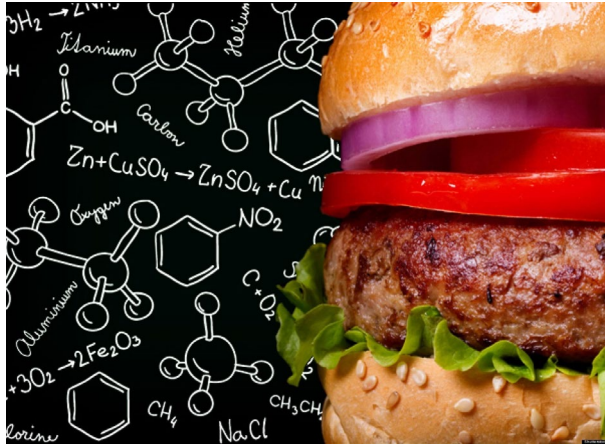
# Can Food Science and Technology Become a Leading Sector?

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# Summary



## Can Food Science and Technology Become a Leading Sector in Cambodia?

- FDI inflows averaged 7.9% of GDP in 2005-2015.
- Domestic firms don't have the capacity to produce and sell their goods and services in the domestic and international markets.



**The underdevelopment of domestic firms raises uncertainties about future growth.**

**Identifying the key sector – food science and technology R&D to promote domestic firms.**



### Policy Recommendations

*At a minimum, the government must spend 1% to 1.5% of GDP to R&D in food science and technology*

*Food Industry Project, which supports the R&D Center*

*Promote and improve financial and fiscal support to food firms*

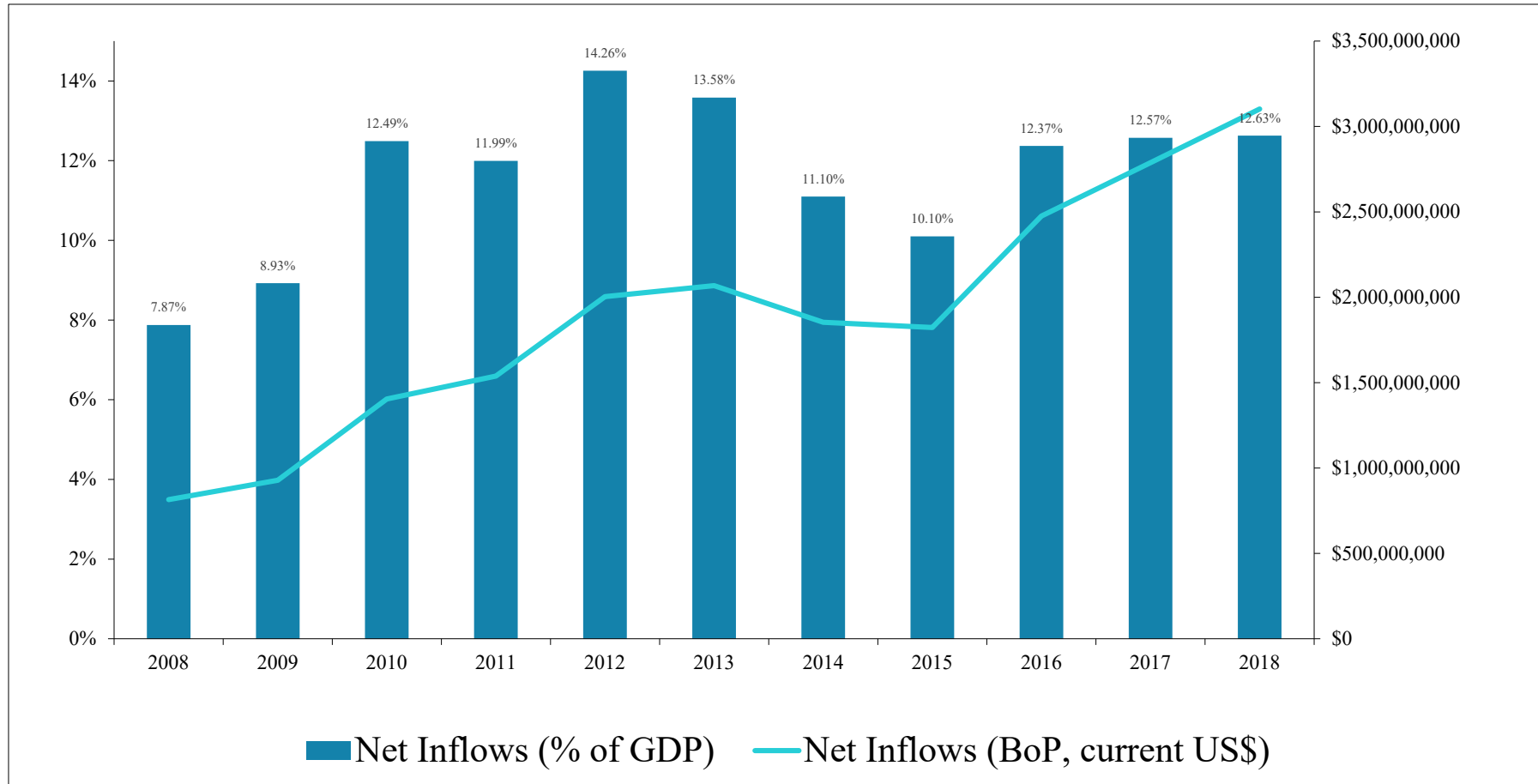
*Improve the quality of digital and physical infrastructure*

# Background

- FDI inflows averaged 7.9% of GDP in 2005-2015 ([World Bank, 2017](#)).
- Domestic firms don't have the capacity to produce and sell their goods and services in the domestic and international markets.

# Foreign Direct Investment in Cambodia

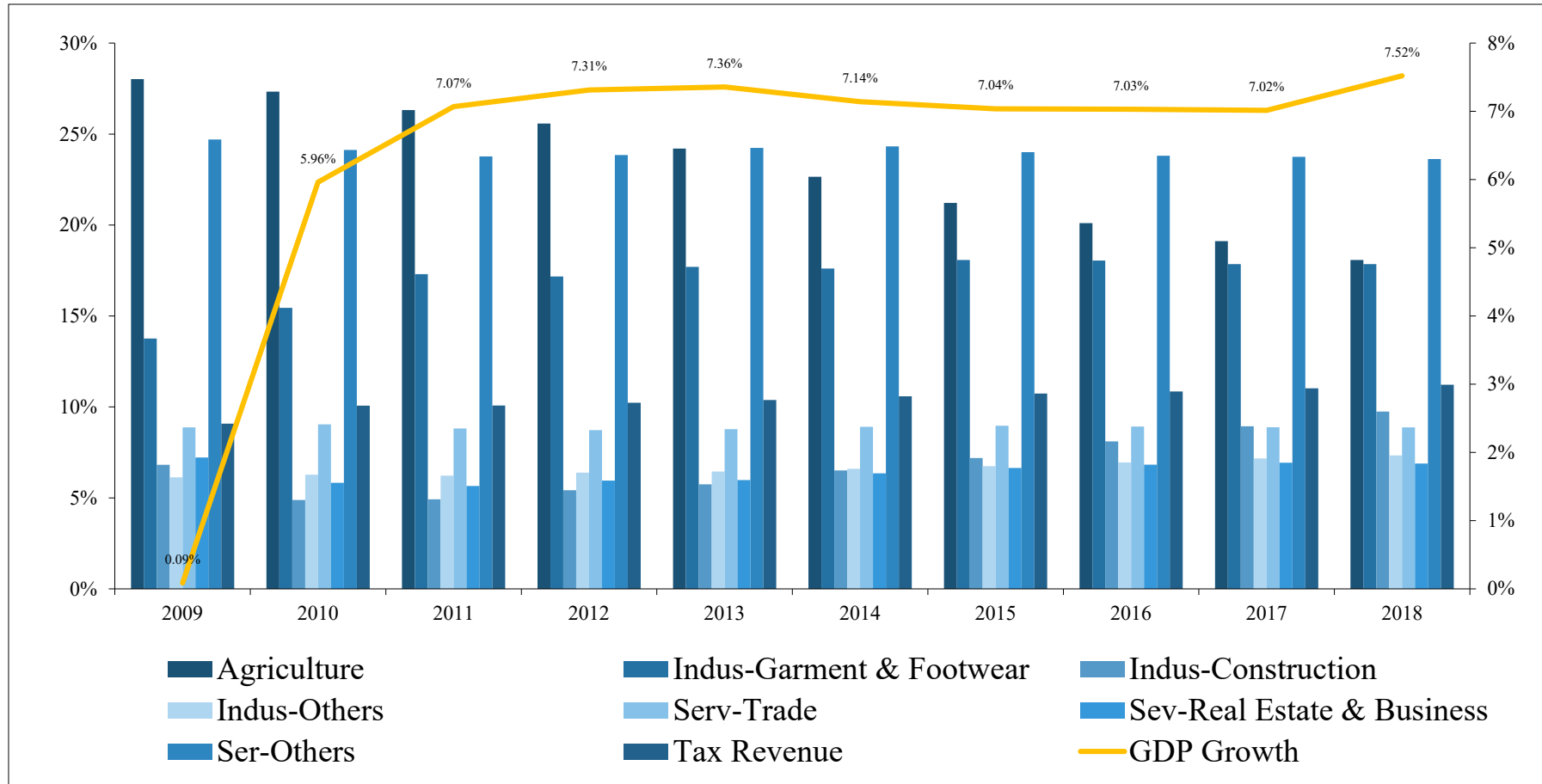
Figure 2: Foreign Direct Investment, Net Inflow in 2008-2018



Source: Cambodia Economic Update ([World Bank, 2019](#))

# Leading Sectors Drive Economic Growth

Figure 1: Percentage Contribution of Leading Sectors to Cambodia's GDP in 2009-2018



Source: Ministry of Economy and Finance 2018

# Problem Discovery

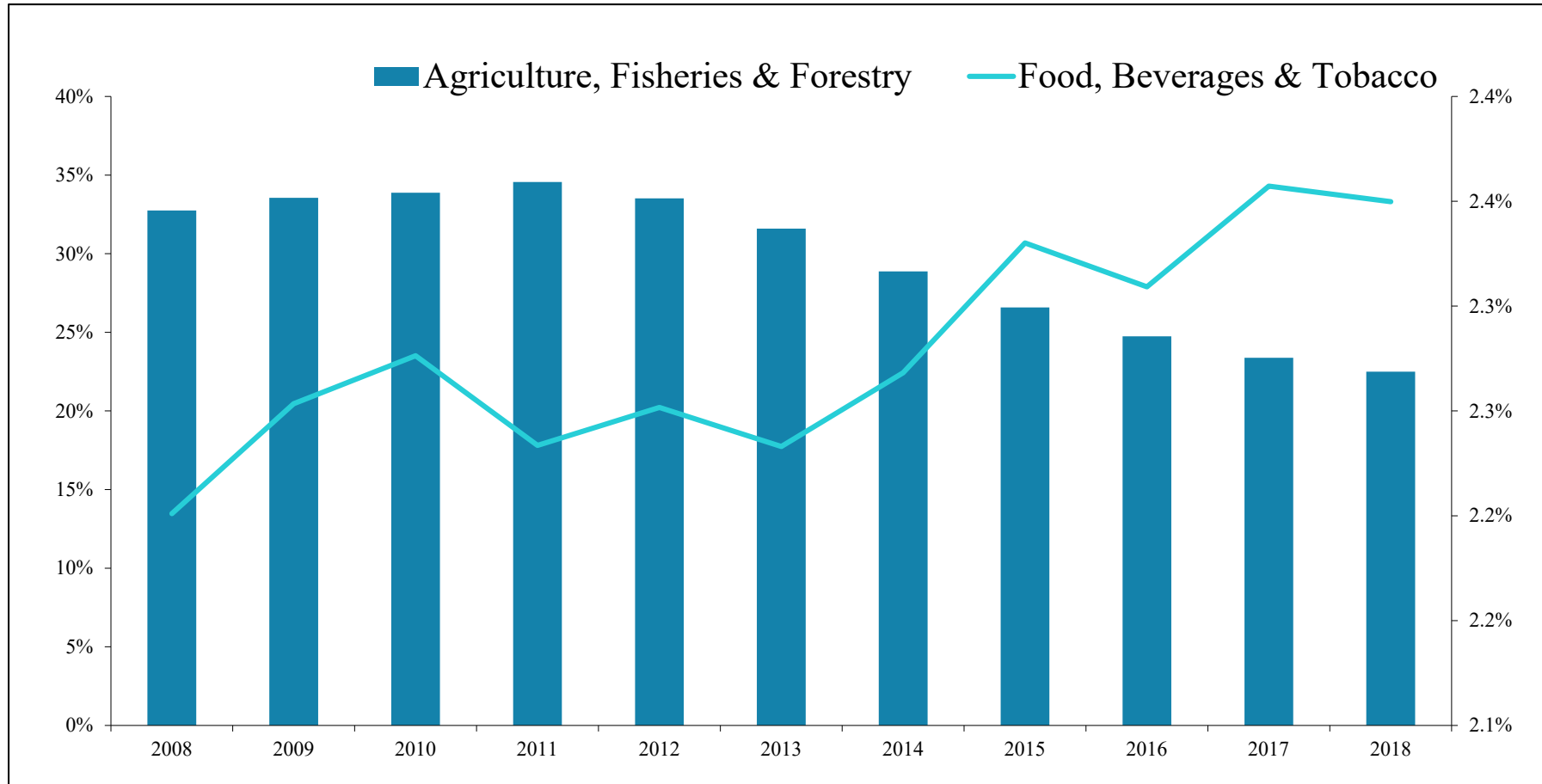
The underdevelopment of domestic firms raises uncertainties about future growth.

# Root Cause

- Leading sectors are fundamental drivers of economic growth in a country that contributes significantly to GDP ([Mardalena, Adji, Suhel, & Andaiyani, 2019](#); [Reuveny & Thompson, 2001](#)).
- Identifying the key sector – food science and technology R&D to promote domestic firms.

# Can Food Science and Technology Become a Leading Sector?

Figure 3: Percentage Contribution of Cambodia's GDP in 2008-2018

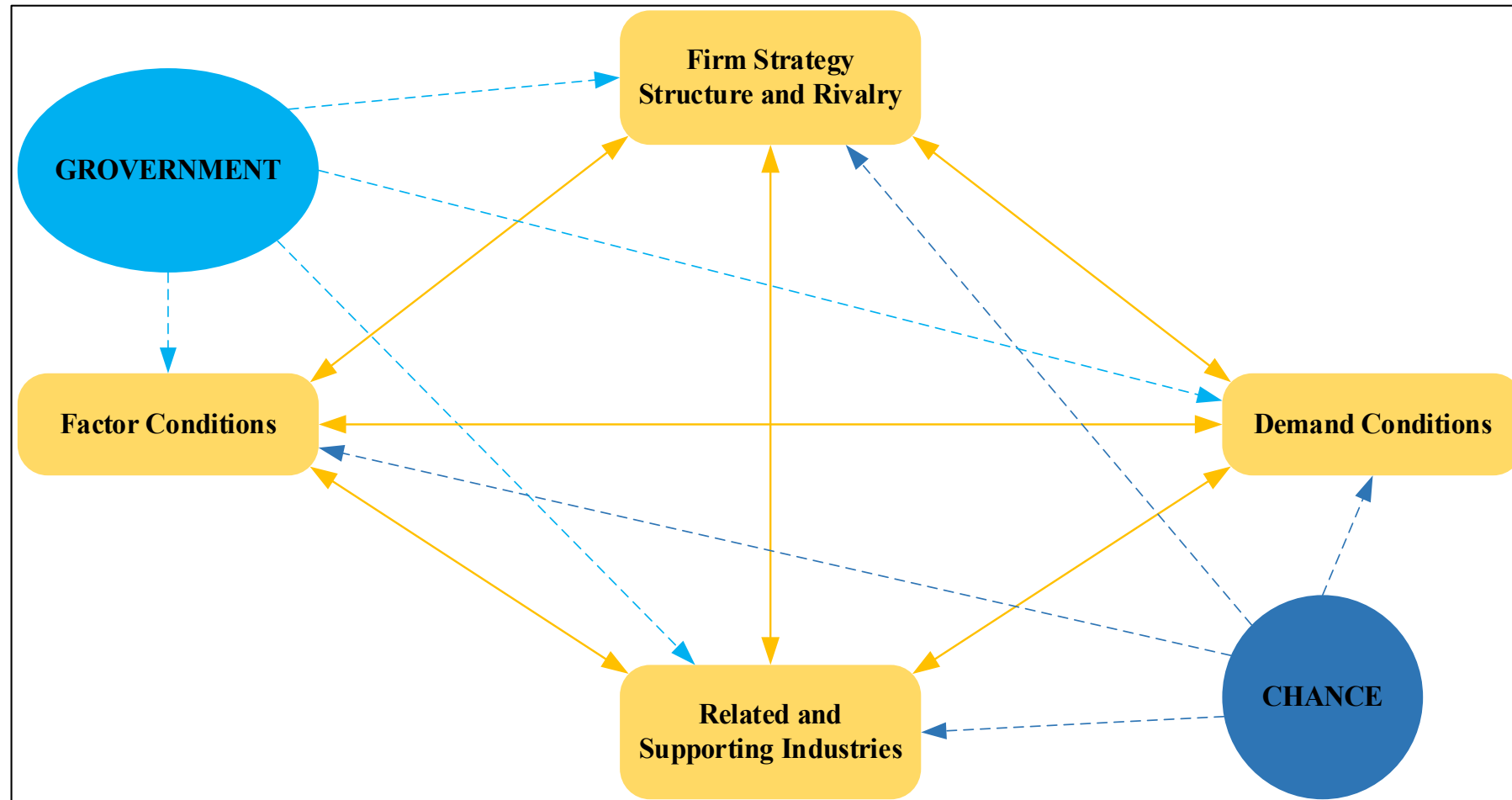


Source: Ministry of Economy and Finance 2018



# Government's Role in Promoting the Leading Sectors

Figure 4: Determinants of National competitive Advantage



Source: *The Competitive Advantage of Nations*, (Porter, 1993)

# R&D Role in Promoting Long-Term Economic Growth

- Innovation initiative leads to economic growth in a country, disseminates to the rest of the world, and stimulates the development of the world economy.
- The statistical analyses found that firms with persistent R&D commitment have 13% higher labour productivity than non-R&D firms, and 9% higher productivity than firms which make occasionally R&D efforts, controlling for differences in past labour productivity ([Börje & Hans, 2010](#)).
- The limitation of the cash flow from SMEs is a consequence that they cannot improve their labour force, capital, and technical progress ([Modelski & Thompson, 1996](#); [Peretto, 1999](#)).

# Policy Recommendations

- The Government should establish a National Research and Development Center. At a minimum, the government must spend 1% to 1.5% of GDP to R&D in food science and technology.
- Food Industry Project, which supports the R&D Center.
- Promote and improve financial and fiscal support to food firms.
- Improve the quality of digital and physical infrastructure.

**Thank you!**