# Global perspectives on agricultural innovation trends and policies

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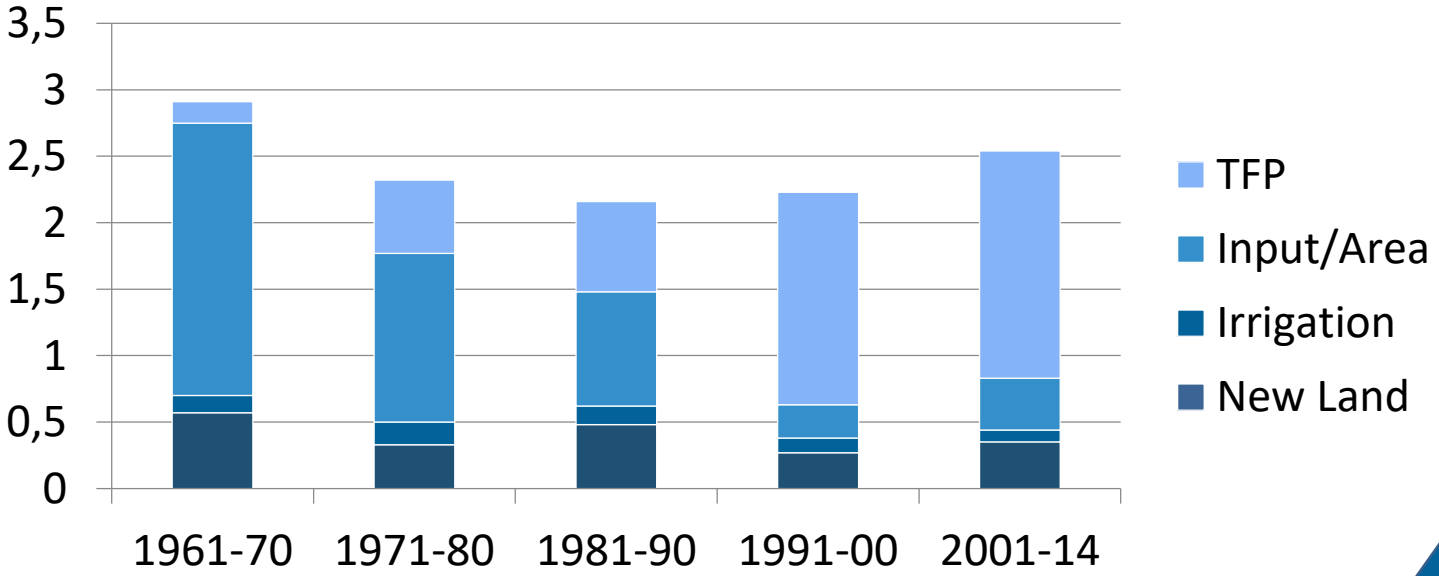
# Sources of Growth in Global Agriculture




Source: USDA, Economic Research Service, *International Agricultural Productivity* data product, as of October 2017

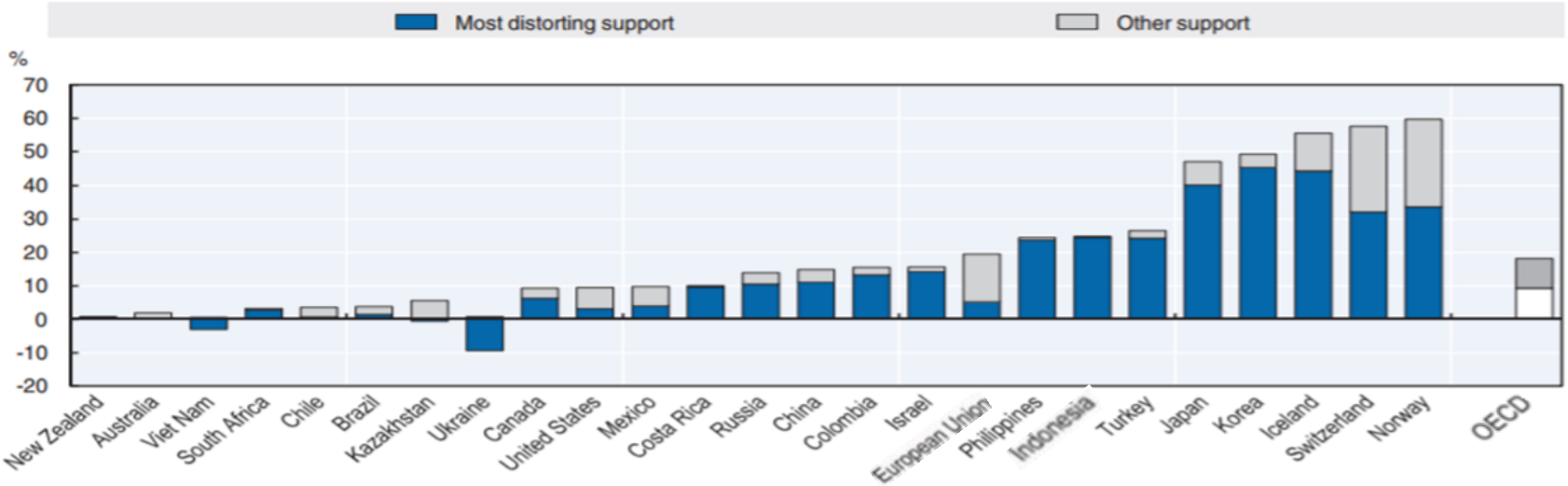
# Why the emphasis on innovation?

- Improved productivity, competitiveness, incomes
- Lower costs to consumers in the long-run
- Improved sustainability and protection of natural resources
- Adaptation to climate change (and mitigation)
- Reduced losses along the food chain
- Improved nutritional attributes of food
- Better traceability and food safety

# Policies are mis-aligned

## Producer Support Estimate by country, 2014-16

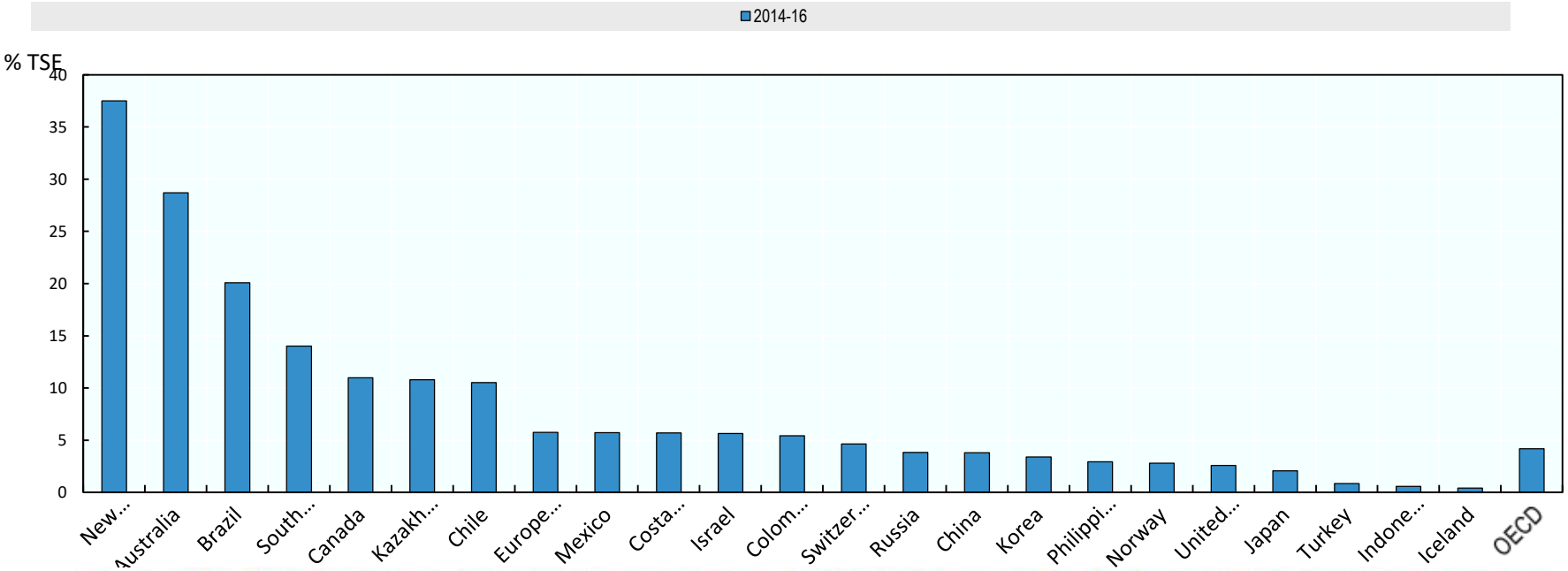
Percentage of gross farm receipts




*Source:* OECD (2017), "Producer and Consumer Support Estimates", *OECD Agriculture statistics* (database), *http://dx.doi.org/10.1787/agr-pcse-data-en.*

# Share of AIS in Total Support

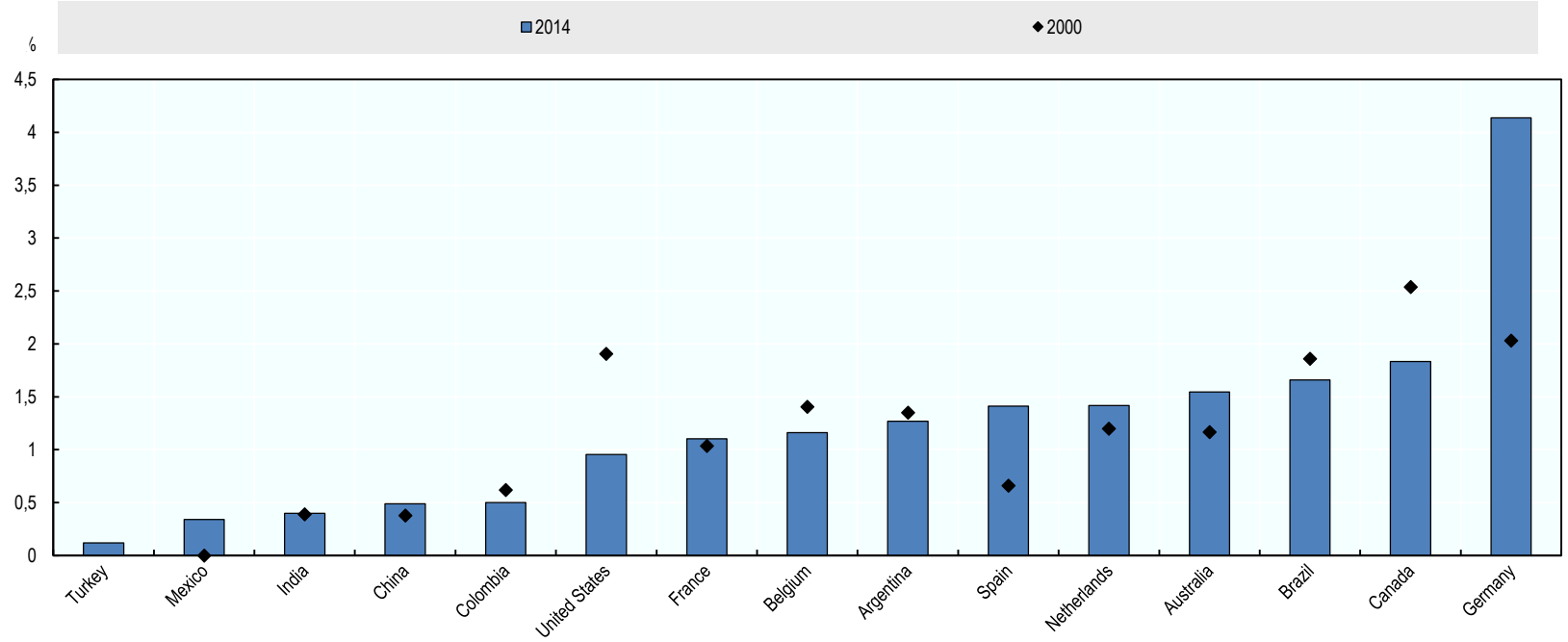
## 2014-2016




Source: OECD (2017), "Producer and Consumer Support Estimates", *OECD Agriculture statistics* (database), http://dx.doi.org/10.1787/agr-pcse-data-en.

# R+D Intensity in Key Countries

**Share of budget expenditures on agriculture R&D as a percentage of agricultural value-added, 2000 and 2015**




*Source:* OECD (2017), "Producer and Consumer Support Estimates", *OECD Agriculture statistics* (database), *http://dx.doi.org/10.1787/agr-pcse-data-en.*

# What should governments do?

- Dismantle policies which encourage damaging and unsustainable production practices and stifle innovation
- Focus a new policy paradigm on three pillars
    - Strengthened agricultural innovation systems
    - Risk management and resilience
    - Environmental performance, resource conservation and climate change

# Strengthen Innovation Systems

*- In a context of tight budgets*

- By increasing effectiveness of existing systems, targets, accountability, value for money
- With new institutional designs and governance models, more reactive and interactive, more bottom-up and demand driven
- Broader approaches – institutional, marketing, environment, health, food chain, not only technological
- A bigger role for the private sector, more project based (rather than institutional), PPPs
- Linked to other sectors - ICT, natural resources, bio and nanotechnologies
- Foster national and international collaboration

# What role for extension services?

## Trends

- Fewer advisors addressing groups of farmers (not individuals)
- Use of ICT to connect with “clients”
- Broader range of issues – management, environment, climate, regulatory or policy compliance
- Emergence of new actors, private, more competition
- New funding mechanisms – levies, vouchers, cost-sharing

## Role of Governments

- Set priorities
- Provide the enabling environment (e.g. connectivity)
- Create the system architecture
- Ensure that extension officers are well-trained
- Directly intervene where the private sector will not

# Defining Roles and Incentives

## The Public Sector

- Long-term strategic priority settings in consultation with stakeholders,
- Direct provision of public goods
- Governance, regulatory frameworks
- Monitoring and evaluation

## The Private Sector

- Incentives – profitability
- IPR protections

## For consumers

- Information and trust are key

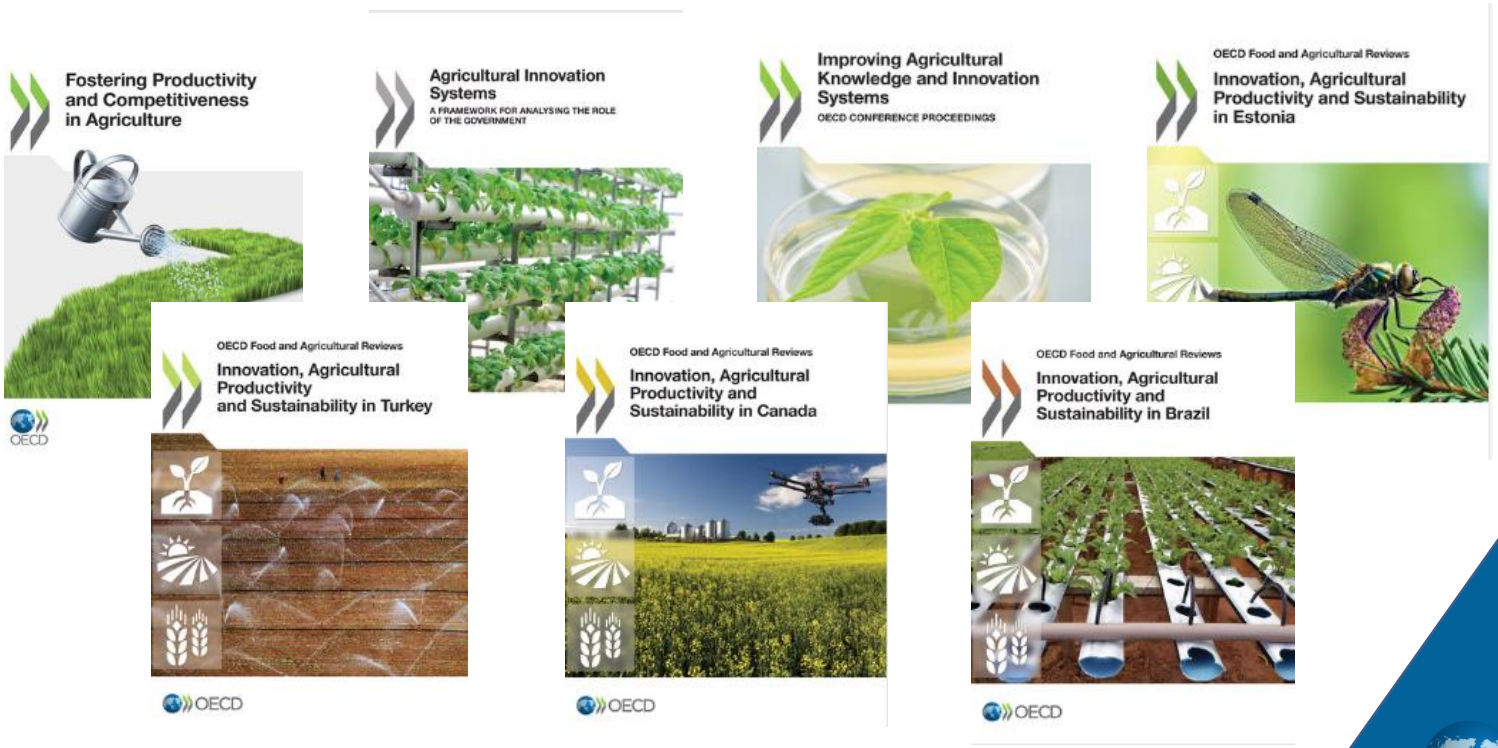
## Overall Consistency –

- All signals pointing in the same direction, an end to “one foot on the accelerator and one foot on the brake”

# Main Messages

- Current policies are mis-aligned with stated objectives and some are exacerbating the problems
- High performing agricultural innovation systems key to achieving sustainable productivity growth
- Need new, non-linear, integrated systems approaches to innovation, with many actors, public and private
- Government needs to provide strategic priority setting, governance, regulatory frameworks, appropriate incentives and protections, direct investment for “public goods”

# Our Recent Publications



# Thank You!

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