Policy Convergence and Policy Paradigm Shifts

Explaining Policy Convergence and Divergence through Policy Paradigm Shifts: A Comparative Analysis of Agricultural Risk Governance in OECD Countries

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Abstract This study analyses policy convergence in agricultural policies and shows that the predominant policy paradigm of a country can be a major barrier that impedes policy convergence. To provide empirical evidence for the link, this research studies risk management support in agricultural policies in the framework of historical institutionalism by using a mixed methods approach. The comparative policy analysis of agricultural risk governance in OECD countries suggests a high path dependency of established institutions and instruments of the underlying policy paradigm that frequently prevent major support for risk management tools and do not lead to a clear policy convergence.

Keywords: agricultural policy; climate risks; comparative research; neo-liberalisation; policy change; post-exceptionalism

1. Introduction

The agricultural sector faces several new challenges, which have led to an intensive discussion about the need to consider risk management tools in agricultural policy portfolios over the last years (Smith and Glauber 2012). One reason is the recognisable trend in many Organisation for Economic Co-operation and Development (OECD) countries to replace trade-distorting policy instruments by alternative programmes that continue to improve farm incomes (OECD 2011). This development exposes farmers to higher price volatility on global markets that increases market-related risks to farm income and triggers a preference for instruments that support the marketisation of risks, such as insurances (Tadasse et al. 2016). Other reasons are novel risks from...
environmental change, societal change or biohazards that have been identified (Pe’er and Lakner 2017; Schewe and Stuart 2017). For some of these risks, insurance markets do not exist, because high transaction costs prevent the formation of market equilibria. These market failures can be overcome by public support and might end in policy convergence across OECD countries. International organisations, such as the OECD, Food and Agriculture Organization of the United Nations (FAO) or World Bank, repeatedly appear as promoters of the discourse about agricultural risk management. Policy recommendations demand for abolition of trade distortions harming especially farmers in low-income countries and suggest holistic risk management schemes for agriculture. Part of this has been institutionalised in the Uruguay Round Agreement on Agriculture (AoA). The reform programme improved market access for developing countries and limited trade-distorting instruments, such as price support or tariffs, in favour of no or minimal trade-distorting instruments like fixed direct payments, environmental measures, research or training. In addition, subsidies for financial risk management tools have been to some extent legitimised. In particular, the World Trade Organization (WTO) treaty enables government payments to provide relief from natural disasters, income safety nets or insurance schemes (WTO 1994).

In the past, policy convergence (Bennett 1991) and policy paradigms (Hall 1993) were frequently used approaches to explain policy change, which is one of the most important challenges of public policy research (Bauer and Knill 2014). While policy convergence describes the approximation of policies, policy paradigms rather refer to a worldview within a policy. So far, both approaches have been considered as separate research topics in social sciences, whereby the concept of policy convergence has received less attention in recent years. This paper aims to establish the link between the two concepts and points out that the underlying paradigm of a policy is a major driver or barrier of policy convergence using the example of support for risk management in agricultural policies in OECD countries. In particular, the shift of subsidies from general income support to targeted risk management in the 2014 Farm Bill of the United States has been identified as driving a rare, but fundamental change in agricultural policy towards more market liberalism (Cordier 2015) that indicates the relevance of the research area.

In a policy paradigm which is linked with ideas of an exceptional agriculture, impacts of extreme weather conditions are seen as sector-specific and price fluctuations partly caused by policies through market liberalisation or sanctions (Mahé and Bureau 2016) which could justify financial subsidies for farmers’ income stabilisation. In a policy paradigm which is more linked with market-liberal ideas, the responsibility of agricultural entrepreneurs to hedge normal business risks themselves has been pointed out (Odening et al. 2018). According to the latter understanding, policy should be limited to creating framework conditions for functioning risk markets and providing information and disaster relief in case of extreme calamities. In order to identify patterns of governance responses, this policy analysis answers the following research questions: Is there convergence in agricultural policy instruments? And is this convergence associated with a convergence in policy paradigms?

The findings of this comparative policy analysis of agricultural risk governance in OECD countries does not identify clear convergence of policy instruments, although the relevance of risk management in agricultural policies increased in the last decades. Established institutions and instruments of exceptional policy paradigms of the past can be identified as major barriers that impede policy convergence.
The following section describes the theory of policy paradigms, which helps to illuminate the existence of different types of policy convergence or divergence in the example of agricultural risk management tools. Section 3 contains information about used material and methodologies. Section 4 presents the empirical results of the content analysis and the convergence of support for risk management tools based on OECD data. The final section evaluates to what extent risk management support (RMS) has been adopted in agricultural policies across OECD countries and the reasons for policy convergence and divergence.

2. Theoretical Background and Policy Context

2.1 Policy Change and Policy Paradigms in Agriculture

Negotiations and results of the General Agreement on Tariffs and Trade (GATT) Uruguay Round from 1986 to 1994 became relevant factors in agricultural policy making (Tangermann 2004). Although the main impact of the AoA was not a decline in farm support, in the European Union (EU), the consideration of less trade-distorting and WTO-compliant policy instruments has been interpreted as an ideational shift from agricultural exceptionalism to market liberalism (Daugbjerg 2003). Based on the concept of policy paradigms and social learning (Hall 1993), policy making is based on different ideational frameworks. While changes of policy setting and policy instruments usually belong to normal policy making and learning within an ideational framework, radical changes in terms of policy discourse and ideas indicate a shift in policy paradigm. In the context of agricultural policy, the literature differentiates between a state-assisted agriculture, a market-liberal, a global and a multifunctional policy paradigm (Feindt 2017). The idea of agricultural exceptionalism underpins the state-assisted agriculture paradigm, which considers the agricultural sector as disadvantaged and the maintenance of farm income as a responsibility of the government. The idea of competitive agriculture underpins a market-liberal paradigm, which assumes that a free agricultural market leads to an optimal allocation of resources and only market failures require governmental intervention (Coleman et al. 1996). The global paradigm is based on the idea of harmonisation and emphasised agriculture as a part of global value chains, which intend to improve the nutrition of the entire world population (Welch and Graham 1999). The multifunctional paradigm substantiates the idea of agriculture as a provider of public goods for public money and focuses on complex challenges, such as environmental problems and social needs in rural areas (Josling 2015). Daugbjerg and Feindt (2017) define the current agricultural policy in the EU as a form of “post-exceptionalism”, which describes the partial transformation of a policy field from exceptionalism towards more liberal policy arrangements. Since an ideational framework determines the choice of policy instruments, the support for risk management and its argumentation gives information about the predominant paradigm within OECD countries and may help to identify to what extent an ideational policy change took place.

2.2 Convergence of Risk Management Support

Global challenges, such as the integration of agriculture into liberal markets or climate change, affect most OECD countries, wherefore it is expected that experiences and political responses are exchanged across policy makers and result in policy convergence. By testing different types of policy convergence (Bennett 1991), the paper reviews to
what extent OECD member states made similar policy decisions in the field of agricultural risk management over time.

The concept of policy convergence has been used in research with varying degree of success to explain policy change within international policies (Howlett and Rayner 2006; Kiess et al. 2017). The level of support for selected risk management tools can serve as an indicator for the relative importance of agricultural risk management within a country’s agricultural policy portfolio. The literature distinguishes between different types of international policy convergence (Heichel et al. 2005; Knill 2005): Delta (δ) convergence analyses changes in the distance to a reference policy or value over time. This can be the policy of a pioneer or a desirable ideal, and provides information about the relevance of the policy instrument. The concept of sigma (σ) convergence refers to a reduction of the variation within national policies over time and shows the approximation of policy portfolios. Additional information is provided by beta (β) convergence, which measures to what degree laggards catch up with pioneers over time and shows a potential learning effect of emulators.

Five social mechanisms that cause policy convergence have been distinguished: common problems and their perception (Bennett 1991); harmonisation through supra-national or international law; economic integration, imposition by more powerful countries; and transnational communication (Holzinger and Knill 2008). The degree and pace of policy convergence is influenced by facilitating factors like the cultural, institutional and socio-economic similarity of countries. These factors are at least to some degree interdependent, with ideas, instruments and settings of the underlying policy (Lenschow et al. 2005). In order to test the existence of policy convergence, identified social mechanisms serve as a theoretical explanation for the preparation of the following three hypotheses. The hypotheses are complementary and help to present a comprehensive picture of policy convergence or divergence in terms of the relative importance of the policy instrument, the approximation of policies and the learning effects within the OECD.

The integration of agriculture in the GATT necessitated major agricultural policy reforms by limiting distorting price support in some countries, in particular in the former European Community, which brought a higher degree of harmonisation and market liberalism in the early 1990s (MacLaren 1992). A lower level of agricultural support and protectionism compared to the mid-1980s led to more economic integration of the agricultural sector. Compliance with WTO rules on non-distorting support and a resulting interdependence on global markets, which became more volatile, inter alia through increased financialisation (Tadasse et al. 2016), are considered as a major reason for an overall increasing importance of risk management in OECD countries. A second problem for the agricultural sector is the higher frequency of extreme weather events (IPCC 2014), which threatens crop yields worldwide. Factors that became more relevant in recent years are the easier access to information and the activity of international actors, such as multinational interest groups, international organisations or bureaucrats as knowledge brokers. Their exchange and influence on policy makers in many countries may cause common policy ideas and contribute to convergence (Fouilleux et al. 2017). Since many of these forces advocate the financialisation of risks and governmental action to overcome market failures, it is expected that the relative share of risk management support across all OECD countries has increased over time, which may indicate δ convergence based on a shift away from traditional state-assisted agricultural policy instruments.
Hypothesis H1: Agricultural crises caused by market liberalisation and extreme weather events led to delta (δ) convergence in the relative share of producer support (PSE) for risk management tools in the agricultural policy portfolio across OECD member states since the mid-1980s.

Hypothesis H1 is confirmed if the unweighted mean of risk management support as a percentage of the total producer support increases over the observation period from 1986 to 2016. In this case, it predicts delta convergence whereby no expenditures for risk management is used as a reference value.

Although H1 expects a higher relative importance for risk management across all OECD member states, it is not expected that all countries perceive the same problem pressure due to different conditions and policy paradigms. Not all countries have reformed their agricultural policy towards market liberalisation like highly competitive exporters, such as the United States or EU. In particular, countries with geographical specialities and comparative disadvantages in terms of agricultural productivity, such as Switzerland or Iceland, still follow an exceptional paradigm and insulate their agricultural producers from price fluctuations of global markets (Feindt 2007). Protectionism raises the income of domestic farmers who produce imported goods and disadvantage consumers as well as farmers who produce exported goods. Furthermore, differences apply to the perceived consequences of climate change. As the effects threaten regions to varying degrees, risk management is less urgent to highly protected farmers in temperate areas than to less protected farmers in arid areas, which implies an increased variation of risk management support across OECD member states over time and differences in the underlying policy paradigms.

Hypothesis H2: The extent to which farmers are affected by agricultural crises varies across countries, which led to sigma (σ) divergence in the relative share of producer support (PSE) for risk management tools in the agricultural policy portfolio across OECD countries since the mid-1980s.

Hypothesis H2 is confirmed if the standard deviation of risk management support as a percentage of the total producer support across OECD member states is increasing in the observation period from 1986 to 2016.

The incorporation of countries into already existing multinational organisations, such as the OECD or EU, often leads to harmonisation through accession negotiations and legal amendments beforehand (Molle 2017). It applies as well to the conclusion of trade agreements between countries, which lead to a higher degree of economic integration of the countries and goes hand in hand with intensive communication processes of international elite networks (Bennett 1991). It may lead to voluntary policy emulation through policy learning from partners that are similar (Morin and Rochette 2017) or even to policy convergence under compulsion in the case of unequal negotiation partners. Especially investments and lobbying of private actors, such as multinational companies, play an increasingly important role when it comes to advancing policy instruments among laggard countries. Therefore, it is expected that laggard member states have emulated policy pioneers, which would speed up processes of policy learning for the implementation of risk management support although a shift in policy paradigms is not necessarily complete.
Hypothesis H3: Laggard countries caught up with policy pioneers from the past, which led to beta (β) convergence in the relative share of producer support (PSE) for risk management tools in the agricultural policy portfolio across OECD member states since the mid-1980s.

Hypothesis H3 is confirmed if laggard countries caught up with policy pioneers in the period from 1986 to 2016. In contrast to σ convergence, it is not about the difference between risk management support of all observed countries, but only about the distance between countries.

2.3 Risk Management Tools

This article focuses on tools which are financially supported by OECD member states to increase the financial robustness of agricultural producers in times of crises. Supported risk management measures can be divided into ex ante and ex post risk management support. While ex ante risk management support partially implies contributions of agricultural producers for hedging financial risks before damage occurs, taxpayers usually take over the costs for ex post risk management support completely (Bardaji and Garrido 2016). In this study, selected ex ante risk management tools are grants for forms of public–private partnerships, such as insurance premiums that secure against specific weather risks (e.g. rainfall or frost), guarantee a fixed level of crop yield, or cover revenue losses of the farmer. Other selected ex ante risk management tools include price hedging on the commodity futures exchange to smooth incomes or deposit schemes that allow agricultural producers to form tax-free reserves in high-income years and reduce them in low-income years. Analysed ex post risk management tools include disaster assistance for producers suffering from the consequences of natural disasters as well as ad hoc payments or tax exemptions that compensate for specific product losses or general revenue declines compared to previous years. Concessional loans allow bridging liquidity shortages after crises with low-interest or interest-free loans. Both, ex post and ex ante risk management tools are usually subsidised on a percentage basis that causes government spending for risk management to increase in high-price phases. However, ex post risk management tools require more budget flexibility than state expenditures for ex ante risk management tools.

There are three main obstacles to the development of insurance markets for agricultural risks. First, despite a willingness to pay for individual risk management tools, such as weather or price insurance (Mußhoff et al. 2014), only a minority of agricultural producers secure their risks without governmental interventions in practice (Mahul and Stutley 2010; Munich Re 2017). Second, asymmetric information about individual production risks lead to a principal–agent problem between insurance companies and farmers that may justify subsidies to overcome the failure in the agricultural risk market from the perspective of welfare economics (Coble and Barnett 2013). Especially for regional insurance companies or insurance pools on mutuality, systemic risks, such as nationwide catastrophes and fast-changing markets, are big challenges that can lead to an insolvency of the insurer through losses of large numbers of insured farmers at the same time (Severini et al. 2018). Consequently, it is a crucial challenge that agricultural producers are protected against increasing production and market risks without crowding
out the private insurance sector or shifting production to less sustainable ways of production through incentives for standardisation and risk-taking behaviour.

Before the relative importance of risk management support in agricultural policies and hypotheses about the convergence of risk management support are analysed in detail, the following section explains the data and research methods.

3. Material and Methodology

The data source for comparative policy analysis are the Agricultural Policy Monitoring and Evaluation reports of the OECD in the period from 1988 to 2018. OECD authors prepare these reports in collaboration with country authorities that deliver statistical data and reviews. Because the material follows a consistent structure, it gives a comprehensive overview and documents policy change in the agricultural sector in OECD member states over time, which represents the most important agricultural producers in the world. The data were examined by a combination of theory-led and inductive content analysis (Mayring 2014) supported by the coding programme MAXQDA 12. The software assists to collect, organise, analyse and reflect the data by coding and writing memos that help to conceptualise empirical observations. Through analysing the context in which the keyword “risk management” appears in the reports about OECD countries, the analysis maps, first, the adoption of risk management as either policy goals or instruments in each country and, second, the ideational framework in which the instrument has been embedded. In the first round of coding, the focus was primarily on the ideational framework of the policy that reflects the four policy paradigms in agriculture (see section 2.1). In the second round of coding, the term “risk management” was coded with regard to the purpose of the policy. Since not all hits were embedded in a context, they could not all be assigned to a specific policy paradigm or purpose. Furthermore, as policy recommendations and evaluations of the OECD represent the views of the authors or organisation rather than the policy measure itself, hits in these sections were not included in the analysis.

In order to make quantitative statements about the diffusion of risk management tools in policy paradigms and the convergence of agricultural policies, annual OECD country data from 1986 to 2016 on the level of Producer Support Estimate (PSE) were also used. The level of PSE is another indicator that gives information about the underlying policy paradigm of a policy. A low level of PSE is assigned to market-liberal ideas, while a high level of PSE is assigned to state-assisted or even multifunctional ideas. In order to distinguish between the exceptional paradigms, the analysis uses the share of conditional payments as an indicator for multifunctionalism. The research included the selection and summation of yearly public spending for selected ex ante, ex post and general risk management programmes. Selected tools represent the most frequently mentioned measures in the OECD reports and are supported by at least one member state (OECD 1988–2018). To analyse the relative importance of the policy instrument, expenditures for risk management are set in relation to the total PSE of a country. Considering differences in currencies and purchasing power, a comparison of absolute numbers would be less revealing.
4. Empirical Findings

4.1 Occurrence of State Support for Risk Management and Links to Agricultural Policy Paradigms

The search for the term “risk management” in Agricultural Policy Monitoring and Evaluation reports of the OECD from 1988 to 2018 yielded 264 hits (see Figure 1). The first peak of the topic was around the millennium when risk management was mostly related to food safety reforms as a consequence of the bovine spongiform encephalopathy (BSE) crisis. The second peak of the term “risk management” in 2011 was a consequence of the food price crises between 2007 and 2011 and became a major recommendation of the OECD to stabilise markets and farm incomes in times of catastrophe. In these reports, the term is often related to the implementation of industry-led risk-management tools and the provision of information. Since then, risk management remains a regular feature in the OECD report. In documents from 2012 to 2018 risk management is often mentioned as necessary to build resilience against new challenges of agriculture.

In the first round of coding, “risk management” was coded 87 times in connection with the market-liberal paradigm, 17 times connected to the multifunctional paradigm, 11 times related to the state-assisted agriculture paradigm and three times related to the global agriculture paradigm. The 87 links with the market-liberal paradigm include 54 sub-codes with recommendations of OECD authors, 12 of which are related to the support of non-insurable catastrophes only in order to avoid crowding-out effects of private investments in the insurance market. The remaining 33 codes link “risk management” to a market-liberal policy context in the respective OECD member state. The 17 links between risk management and the

Figure 1. Occurrence of “risk management” in OECD reports

Source: Author.
multifunctional paradigm focus on more holistic approaches to reduce risks and contain six sub-codes for environmental, organic and rural development contexts. All 11 links of risk management to the state-assisted agriculture paradigm belong to the sub-code farmers’ income, which considers the need for state-supported risk-management tools to maintain the income of farmers. The three links between risk management and the global agricultural paradigm were connected to sub-codes food security or protection of poor consumers in the Global South. Since the analysis found few links between the global agriculture paradigm and “risk management”, it has been excluded from further analysis.

In the second round of coding, the purposes of “risk management” policies were coded. The purposes related to “food safety”, “institutional framework” and “building resilience” were most relevant and helped to understand the motivation for the support of risk-management tools as a political instrument. 19 codes were related to food safety. 54 codes describe the institutional framework. These hits were divided into different sub-codes (and their frequency), which explain the target of the risk management measure in detail. Six purposes were found to which risk management policies were linked: to enhance the information of agricultural entrepreneurs (18), improve research (10), spare strained government budgets (5), describe pilot projects (4), offer flexibility (3) or assess existing risk management tools (11). As a relatively new purpose of “risk management”, building resilience was coded 35 times; 18 of these codes were sub-codes related to new challenges(4), such as economic crisis (1), price volatility (6) or climate change (7).

In particular, coded data shows differences between the impacts of the food safety and the food price crises: policy change in response to the food safety crisis aimed at improving control measures and quality assurance of food. Policy change in response to food price crises aimed primarily at improving the institutional framework of market-oriented insurance schemes by providing institutions and information. However, to a lesser extent policy responses aimed at building resilience through socio-environmental measures that address new challenges such as climate change. Overall, the term “risk management” was used most often by the OECD authors in policy descriptions of Canada (46), Australia (19), USA (19), the EU (13) and New Zealand (13). These findings also show the relevance of risk management in the policy of these countries. While Canada already established an extensive insurance scheme in 1959, the policy and its institutions in the area of agricultural risk management were seen as pioneers. After the food price crises 2007/2008 and 2011, agricultural risk management received increasing attention in Australia, in some member states of the EU and especially in the USA, which had also set up its own risk management agency in 1996. New Zealand represents a very competitive agricultural sector with high food safety standards and a policy that seems to follow a strict market-liberal paradigm. This is expressed by few support measures for agricultural producers that restrict risk management support to disaster relief.

In general, the results of the content analysis of the OECD reports indicate that the topic of agricultural risk management was most relevant in countries with an increasing influence of the market-liberal paradigm, although the term also occurs in a state-assisted and in a multifunctional context, in particular since 2012. The most important purposes across OECD countries for risk management reforms were enhancing the institutional framework and building resilience.
To what extent the implementation of different risk management tools in the OECD discourse coincides with the intensity of financial support of risk management is analysed in the following section. It is expected that the consideration of policy paradigms will help to explain policy convergence or divergence in the area of agricultural risk management. Section 4.2 clarifies to what extent policy convergence has taken place and how the instrument has been diffused across OECD member states.

4.2 Convergence of Risk Management Support

In the following, the three hypotheses (section 2.2) regarding policy convergence are analysed and tested. Figure 2 shows the unweighted mean of expenditures for selected risk-management tools as a share from the total PSE of OECD member states in percentages and its standard deviation from 1986 to 2016.

The figure indicates an upward trend in the aggregated share of risk management support as part of the total PSE across OECD countries since 1994. On average, expenditures for risk management rose from 5 to 10 per cent of PSE. However, the ongoing liberalisation of countries that export agricultural products, such as New Zealand, and the GATT agreement led to significant changes in agricultural policies and an overall decline of support for risk management during the 1990s. The rise since the millennium and peaks during the commodity price crises in 2007/2008 and 2011 can be explained through the relationship between risk management support and global challenges, such as diseases or price crises, which caused ex post payments for farm losses through high input costs and increased premiums for subsidised margin insurances. Additionally, improved world market prices triggered less public spending for other policy instruments, such as price interventions. While the overall level of PSE and producer price protection decreased over the years (OECD 2018), the

Figure 2. Aggregated share of RMS in PSE of OECD member states

Source: Author, based on OECD (2018).
increasing share of risk management support indicates that risk management plays an increasing role in agricultural policy portfolios.

**Hypothesis H1:** Agricultural crises caused by market liberalisation and extreme weather led to an increased relative share of risk management support in the observation period from 1986 to 2016, which suggest a slightly positive $\delta$ convergence across OECD countries under the premise that a budget share of 0 is used as a reference value. H1 is therefore confirmed and indicates overall a slight shift away from state-assisted agricultural policy instruments of the past towards targeted risk management.

However, the standard deviation of the mean risk management support shows an upward trend over time and fluctuates in parallel with change in the mean value (see Figure 2). Although the minimum value of the mean risk management support in 1994 indicates a harmonisation of policies across countries because of the Uruguay Round, the public spending for risk management diverged across the member states afterwards. This indicates that some countries increased their share of risk management support strongly over the years while other countries do not perceive risk management as a public responsibility or apply other policy instruments (e.g. direct payments or tariffs) that increase farmers’ income and make risk management less urgent.

Hypothesis H2: The extent to which farmers are affected by agricultural crises varies across OECD countries. These differences led to an increasing variation of risk management support and constitutes $\sigma$ divergence since the mid-1980s, although the standard deviation decreased temporarily in the 1990s. H2 is therefore confirmed and suggests divergence of the underlying policy paradigms, too. To further explore the mechanisms behind the findings it is necessary to take a more detailed look into the disaggregated country data.

Hypothesis H3 is analysed by the relationship between PSE and its share of risk management support in OECD member states over time. The comparison of the periods 1984–1986 and 2014–2016 is shown in Figure 3 and is based on (OECD 2018). A first look at the country data suggests an expected negative correlation between producer support and its share of support for risk management, but the relationship is not clear. Risk management has a high priority in some countries with rather low producer support, such as the United States, Canada, Australia and Mexico. Although the overall level of PSE decreased over the years in most member states, subsidies for targeted risk management have not been used as an important component of their agricultural policies. In countries such as Iceland, Japan, Korea, Norway or Switzerland a high level of PSE and commodity prices between 48 and 60 per cent above global markets often make risk management less urgent. Highly competitive and exporting countries like New Zealand or Chile did not support selected risk management tools for farmers in a relevant intensity between 2014 and 2016, although they strongly depend on global market prices. A second group consists of countries with a moderate PSE and low risk management support and includes the EU, Israel and Turkey.
Hypothesis H3: Laggard countries caught up with policy pioneers from the past, which suggest β convergence across OECD member states since the mid-1980s, but the disaggregated data show that only four countries adopted risk management support above the 10 per cent level. H3 is therefore not confirmed. Different levels of PSE and the choice of other policy instruments indicate strong divergence in the underlying policy paradigms across OECD countries.

4.3 Policy Paradigms and Risk Management Support

As described in section 2.1., the choice of policy instruments can be assigned to an underlying agricultural policy paradigm. Table 1 displays countries that spent more than 5 per cent of their PSE on one risk-related instrument from 2014 to 2016 (OECD 2018) and its assigned paradigm. The assignment of policy instruments to paradigms was based on their primary goals, degree of private partnerships and contribution to public goods based on OECD reports. Besides ex ante and ex post risk management tools, the table also shows countries that support adaption against socio-environmental change by conditional payments, which are generally considered as WTO compliant.

Although risk management is often embedded in a market-liberal context in the OECD discourse (section 4.1), public spending to support risk management and its goal can be embedded in very different policy paradigms. Mexico supported price hedging on the commodity futures exchange, while Australia and Canada allowed farmers to form tax-privileged reserves that can be assigned to a post-exceptional policy paradigm. Since contracts on the commodity futures exchange have a significant minimum size that often excludes small farms from price hedging and tax rates
Table 1. Selected policy instruments in policy paradigms, 2014–2016

| Category          | Policy instrument            | Policy paradigm        | Countries (≥ 5% of PSE)                                      |
|-------------------|------------------------------|------------------------|------------------------------------------------------------|
| Ex ante RMS       | Insurance premium subsidies | Post-exceptional       | United States (16%), Canada (12%)                          |
|                   | Price hedging subsidies     | Post-exceptional       | Mexico (10%)                                               |
|                   | Deposit schemes             | Post-exceptional       | Australia (21%), Canada (5%)                               |
|                   | Revenue/income safety nets  | State-assisted         | United States (19%), Canada (5%)                           |
|                   | Disaster assistance         | State-assisted         | Canada (8%)                                                |
|                   | Concessional loans          | State-assisted         | –                                                           |
| Socio-environment support | Conditional payments       | Multifunctional        | European Union (60%), United States (50%), Switzerland (41%), Chile (39%), Australia (19%), Norway (9%), Japan (6%) |

*Source:* Author, based on OECD (2018).
are related to the amount of profit, it is expected that especially large and very competitive farms benefit from these kinds of support. Another tool that is assigned to post-exceptionalism is the support of insurance premiums which transfer risks to the private market and may influence farmers’ strategies to avoid risks by farm practices (Antón et al. 2012). While these subsidies were hardly used by EU countries, especially the United States and Canada generated significant amounts of PSE by subsidising farmers to buy multi-peril crop insurance from 2014 to 2016. The effect of governmental insurance premium support is also clearly visible in the distribution of insurance premiums paid worldwide, where North America and Asia (particularly China and India) are by far the most attractive markets for agricultural insurers (Munich Re 2017). Above all, especially the insurance industry and standardised farms with low production diversification are expected to benefit from these subsidies. However, between 2014 to 2016 also a high share of the PSE in the United States and Canada was linked to selected ex post risk management support, such as revenue safety nets or disaster assistance. These tools are assigned to a state-assisted paradigm because they are coordinated by the government and mostly financed by taxpayers’ money. In order to show the increased relevance of the multifunctional paradigm in agricultural policy portfolios, Table 1 presents socio-environmental measures such as mitigation measures or production restrictions, which are subsumed under conditional payments. Although Alons (2017) denotes conditional payments primarily as legitimation to continue income support to farmers in the EU as many of the requirements are not very ambitious, some of these measures may reduce the production risk of farmers by increased diversification. The average share of PSE linked to conditional payments across OECD countries increased from 3 per cent in 1986 to 16 per cent in 2016 and gained particular importance in the 1990s when environmental problems became a bigger concern (Moyer and Josling 2002). In the EU-28, the United States, Switzerland, Chile, Australia, Norway and Japan the application of conditional payments has become a relevant policy part of the policy portfolio to build resilience against market and production risks by compensation for the provision of different types of public services or resource-saving production. It is especially remarkable that these two relatively new policies, the support of ex ante risk management tools and conditional payments, are not mutually exclusive. As the examples of the United States and Australia show, the combination of tools rather favour a holistic risk management policy which considers WTO requirements and avoids trade distortions.

5. Discussion

While countries such as Canada and Mexico subsidise selected risk management tools for farmers to overcome financial risks, countries such as the EU-28, Switzerland, Chile, Norway and Japan rely on conditional payments with varying requirements to help farms to adapt to socio-environmental hazards. Although both pathways are WTO compliant, they still consider the need to support farmers’ income as the core of agricultural policy. However, a partial ideational shift away from the state-assisted agriculture paradigm towards market liberalism seems to enable support for risk management as a major policy instrument. New Zealand and Chile as highly competitive agricultural exporters are the only countries in the
OECD that fully adopt a market-liberal view and allocate the responsibility to hedge normal business risks to the farmers themselves. In many OECD countries, state support still accounts for half of agricultural income or more. This suggests that income risks for agricultural producers continue to be greatly reduced through support by taxpayers.

To assess the diffusion of risk management support across OECD member states, three types of policy convergence were tested. The findings confirm an upward trend in the relevance of state support for risk management as part of PSE (δ convergence). At the same time, however, divergence in support for risk management increased (σ) and only a few countries emulated the policy pioneer Canada (no β convergence). Although a growing problem pressure led in some countries to an increased share of risk management support, there is no clear convergence of agricultural policies across all OECD countries. A higher economic integration through lower support levels, harmonisation through the integration of agriculture in the GATT agreement and international communication through advice by international organisations like the OECD were important factors that explained policy convergence in the past. Similar to other studies of recent years (Horridge and Rokicki 2018; Strunz et al. 2018), this investigation shows that the existence of relevant social mechanisms do not necessarily result in policy convergence. Therefore, the convergence argument fails to explain policy developments in the agricultural sector. One reason may be that the concept does not sufficiently acknowledge the impact of institutions and ideas within the agricultural sector. The OECD data indicates that existing institutions and instruments of policy ideas of the past create a high path dependency that prevents an introduction of risk management support as a major policy instrument in most OECD countries. Relatively unknown, but highly relevant for the diffusion of risk management tools, is the influence of external penetration by lobbyists of the financial industry on agricultural policies. A network analysis of Sheingate et al. (2017) demonstrates a very close relationship between agricultural policy makers and representatives of the financial industry in the United States where risk management support is one of the most important policy instruments. These increasing lobbying activities of the financial industry might also be valid for other countries, as indicated by the presence of actors such as Rabobank in the Netherlands (Daugbjerg and Feindt 2017). Although the insurance programme in the United States shows welfare losses due to excessive subsidies (Yu 2017), rent-seeking behaviour and distributional effects within the agricultural sector strongly depend on the design of the policy instrument. The legislative proposals by the European Commission for the Common Agricultural Policy (CAP) after 2020 advocates a bigger role for risk management (European Commission 2018), which could encourage other OECD member states to also support risk management in the future. Although the CAP 2014–2020 already enables the provision of risk management support, the opportunity is rarely used by its member states (Bardaji and Garrido 2016).

6. Conclusion

The first goal of the paper was to analyse whether there is convergence of agricultural policy instruments, focusing on risk management. The second goal of the paper was to identify whether this convergence is associated with a convergence of policy paradigms. A content analysis of the OECD’s Agricultural Policy Monitoring and Evaluation reports from 1998 to 2018 and an analysis of agricultural producer support (PSE) based on quantitative data from 1986 to 2016 found that risk management became a significant
topic in the OECD discourse during the last decades, especially in the context of food safety, market liberalisation and climate change. Although the GATT AoA forced a change of policy instruments and enabled a partial shift towards market liberalisation, there is no clear convergence of support for risk management tools across OECD countries. Alternative programmes, such as conditional payments, offer a pathway that seems to be favoured by policy makers in countries with an exceptional agricultural policy paradigm.

The comparative study indicates that country-specific path dependencies outweighed the pressure in most OECD countries to support agricultural risk management over the last decades. This demonstrates that the stability of policy paradigms impedes convergence of policy instruments. Nevertheless, in the future, policies might converge gradually in policy mixes with a rising share of risk management support and socio-environmental measures. The problem pressure caused by new drivers like more frequent weather extremes, an increasing influence of the financial sector, an active civil society and an ongoing shift in policy paradigms towards market liberalisation may be crucial. However, novel trends such as the disintegration of the multilateral trade system and rising nationalism could impede such a development in favour of more traditional policy instruments. In order to evaluate to what degree socio-environmental measures caused policy change towards multifunctionalism, country-based in-depth analyses of different requirements are needed. Although the present findings might appear plausible and transferable to other policy instruments or sectors, research is supposed to show whether results can be generalised and to what extent the introduced risk management tools generate their own policy feedback.

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