ORIGINAL PAPER

Rice policy in a transitional economy: balancing the social and political objectives



Hoa-Thi-Minh Nguyen¹ · Huong Do¹ · Adrian Kay¹ · Tom Kompas^{1,2}

Received: 3 August 2018 / Accepted: 27 December 2019 / Published online: 22 February 2020 © International Society for Plant Pathology and Springer Nature B.V. 2020

Abstract

Rice is an important component on the global food security agenda. However, prevailing economic analysis suggests that rice policy globally is often damaging and not economically efficient, rendering food security as a goal highly vulnerable to volatility in the world rice market. This paper explores the case of Vietnam's rice policy as a key rice exporter, a country that has developed highly distinctive policy settings to manage the inherent tensions between 'socialist' policy legacies and 'market-based' objectives during an economy-wide liberalisation process. In open economy political terms, our case study facilitates the exploration of two key issues. First, how well the OECD-centric concept of agricultural policy exceptionalism works in a developing country context. Second, how the policy may succeed politically even in the face of what appear to be severe political constraints from external economic pressures. The paper develops a narrative of the political economy of rice policy in Vietnam during the Renovation (Doi Moi) Period from 1986 to the present. We find, first, that the policy trajectory in Vietnam's rice sector runs counter to recent claims about post-exceptionalism in agriculture; that is, rice policy has resisted pressures to comply fully with market rules despite Vietnam's accession to the World Trade Organization. Second, the interaction of economic liberalisation processes and the ruling Communist Party's political survival strategy results in policy settings that fail standards of policy coherence and are often economically inefficient, although the survival strategy itself remains stable and reform-resistant over time.

Keywords Food policy · Rice · Political economy · Vietnam · Communist party · Exceptionalism

Introduction

The literature on the political economy of agricultural protectionism is heavily slanted to the analysis of advanced industrial countries. In this strand of work, agricultural policy is seen as 'exceptional' (Grant 1995; Skogstad 1998;

Hoa-Thi-Minh Nguyen hoa.nguyen@anu.edu.au

Extended author information available on the last page of the article.

Sheingate 2003), with distinctive sector-specific institutions which protect not just agriculture as an economic sector but also the agricultural policy process itself from the pressures of open economy politics. Indeed, agriculture has often been seen as a paradigmatic case of policy exceptionalism more generally (Daugbjerg and Feindt 2017); an economic sector that is treated as a special case in the policy process, with its own closed, elite-level networks favouring certain special interests over general welfare improving policy reforms.

Recent work has queried whether agricultural trade liberalisation related to the inclusion of the agriculture sector within the WTO in the 1990s has initiated a process of the 'normalisation' of agriculture in policy terms (Daugbjerg and Feindt 2017). This discussion is also catalysed by the unsettling effects of spikes in world food prices in 2007-08 and the re-emergence of a (protectionist) food security agenda after several decades (Grafton et al. 2015). Furthermore, the growing recognition of the part industrial agriculture plays in climate change has generated speculation about agricultural policy being pulled from its exceptional institutional moorings. The evidence for

Special thanks to Tran Cong Thang and Nhung Cam Nguyen for their help with the interviews for this research. We gratefully acknowledge funding from the College of Asia and the Pacific at the Australian National University, and we thank all interviewees for their participation. The paper has been developed substantially from a Crawford school discussion paper, with thanks to two anonymous referees, the Senior Editor, Philip Taylor and the participants of Vietnam Update 2017, East Asian Economic Association 2018, Vietnam Symposium on Leadership and Public Policy 2018, Carsten Daugbjerg, Frode Veggeland and the participants of the European Consortium of Political Research 2019.

de-institutionalisation in the governance of the agricultural sector in advanced economies remains mixed; with the recently freighted term of 'post-exceptionalism' used to describe a partial but incomplete shift away from the closed policy legacies inherited from previous eras. Agriculture thus remains different in several important ways and not an easy case for existing models of open economy politics (Daugbjerg and Feindt 2017; Daugbjerg et al. 2017).

The paper presents a political economy of the development of rice policy in Vietnam during the Doi Moi reforms in and since the 1980s. We argue that, contrary to the 'post-exceptional' trajectory identified in developed economies, rice policy is becoming more exceptional in the context of an economy-wide transition from state socialism to open and price-guided markets. We argue that the post-exceptional label does not usefully describe Vietnam's rice policy or its trajectory even under the pressure of WTO accession. Furthermore, this is a policy trajectory that is not represented in the existing literature on agricultural policy exceptionalism, otherwise dominated by OECD cases, as Vietnam is a developing country in Asia and a one-party socialist state in transition.

We explore the case of Vietnam's rice policy as an exemplary case of the kind of institutional dynamics at the interface of domestic and international policy-making in the context of state socialist policy legacies. This case shows strong, and at least on the surface, unexpected resistance to market liberalisation in which the Communist Party's inherited policy legacy endures, and there is no observed partial shift in policy driven by external pressures. The paper provides evidence of the centrality of rice to Vietnam's governing regime and its essential function in building and maintaining support and, in doing so, reveals a novel underpinning of exceptionalism in agricultural policy not previously catalogued in the literature. We argue that rice policy formulation, which involves the party's top leadership, is critical to the party's political survival and underpins Vietnam's development story in the past, and likely in the future.

In addition to being selected as an exploratory case study of agricultural protectionism, rice is, of course, an important sector in itself: it plays a dominant role in the global food security and poverty reduction agenda. Rice is a staple of many poor people and consumed by half of the world population (Maclean et al. 2013). Its production involves roughly 860 million people, most of whom are poor, where rice production represents the primary source of their income (Dixon et al. 2001). To this end, global poverty reduction and food security benefit significantly from a stable world rice market. However, this market is the thinnest among all cereal world markets, and full of policy interventions by both exporting and importing countries, thus making it the most volatile (Timmer 2012). Indeed, government interventions were found to contribute to the surge in the world rice price in 2006–2008 (Headey and Fan 2008; Dawe 2010; Tadasse et al. 2016), with their impact accounting for approximately 45% of the surge (Martin and Anderson 2011, pg. 426). Among these interventions, those by India and Vietnam as exporting countries and Philippines as an importing country played a decisive role.

The paper is structured as follows. Section "Data and methodology" briefly describes the data and methodology. Section "The economic contribution of rice in the transitional economy of vietnam" reports the contribution of rice over time, at both the country and household level. This section serves as an essential background for "The development of Vietnam rice policy since Doi Moi: Socialist policy legacies in the context of market reforms", which explains the dynamics of rice policy in the nexus of socialist legacies and market reforms. The concluding section summarises the key points from our political economy account of how rice policy in Vietnam remains on an exceptional path.

Data and methodology

The case study of the development of rice policy in Vietnam over the last thirty years presented in the paper is built on an analysis of both quantitative and qualitative data. The quantitative data help us describe the socio-economic structure of Vietnam and how it changes over time. This policy context is vital to understanding why a particular policy is formulated and its potential impact. On the other hand, the qualitative data facilitate in-depth analysis of the policy-making process and reveal policy objectives that are not always visible in formal government documents or discussed publicly in Vietnam. Since this paper focuses on the dynamics of the entire rice-related institutional setting, during the country's economic transition, we believe that a combination of both data sources is essential.

With this in mind, we present the trends of quantitative data at the country and household levels. The primary source for the country-level data is FAOstat (FAO 2019) which is used for its consistency over time. We also cross-check and supplement this source material with data from Vietnam's statistical yearbooks compiled by the General Statistical Office (GSO) (GSO 1997, 2004), and the database of Research and Expertise on the World Economy (Foure et al. 2013) and the International Trade Center (ITC) (ITC 2019). Household-level data come from nationally-representative household living standard surveys, starting from 1993 (see the Appendix for more details). As a common practice, we present value data in the price at the same time for comparison and fully consider the underlying sampling scheme of the survey data.

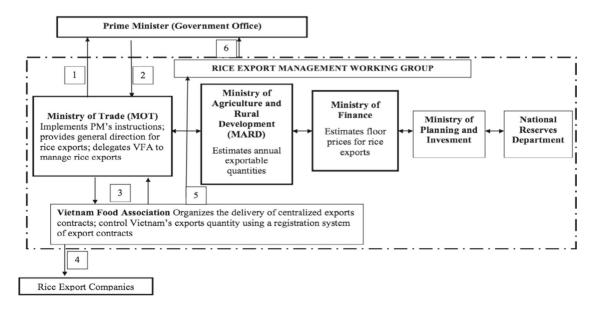
Qualitative data come from both secondary and primary sources. For the former, we review documents issued by Vietnam's authorities, especially the communist party of Vietnam (CPV) - the leading and only party in the country, and the government which is under the CPV leadership. The party provides development goals and directions for the country, typically in the form of its directives and resolutions. Based on these documents, government agencies issue legal documents to guide their implementation. Given this political hierarchy, our review focuses in particular on the party's motivation and its influence on policy formulation. We also carried out 73 semi-systematic interviews with key informants to investigate how different objectives were being balanced in the rice policy-making process. This primary source of qualitative data is more relevant to the analysis of contemporary institutions, not those too far in the past. The reason is that our respondents were in office at the time of the interview, during December 2016 - January 2017, while the on-going transition started more than three decades before, in 1986.

We select a sample of respondents for interview from six categories based on desk research on the structure of Vietnam's rice market. Category 1 consists of central and provincial policymakers from agencies that have been in charge of regulating the market since 2008 (Fig. 1). In category 2 are food export companies including state-owned central and provincial corporations and private companies. Category 3 includes the State Bank (SBV), the Bank for Agriculture and Rural Development (Agribank) – the key executing agency for credit policies for rice, and some private commercial banks. In category 4, we interviewed representatives from academia and non-governmental agencies (NGOs) to get their independent views. We also approached wholesalers, millers, and collectors (category 5), and farmers (category 6) in main rice-producing provinces, namely Can Tho and An Giang in the Mekong river delta and Nam Dinh in the Red river delta. Respondents in these groups were selected from large-, medium- and small-sized entities to provide as diverse as possible perspectives. The Appendix provides further details of the interviews.

Finally, all translation from Vietnamese into English in the paper is made by the lead author who is a native of Vietnam.

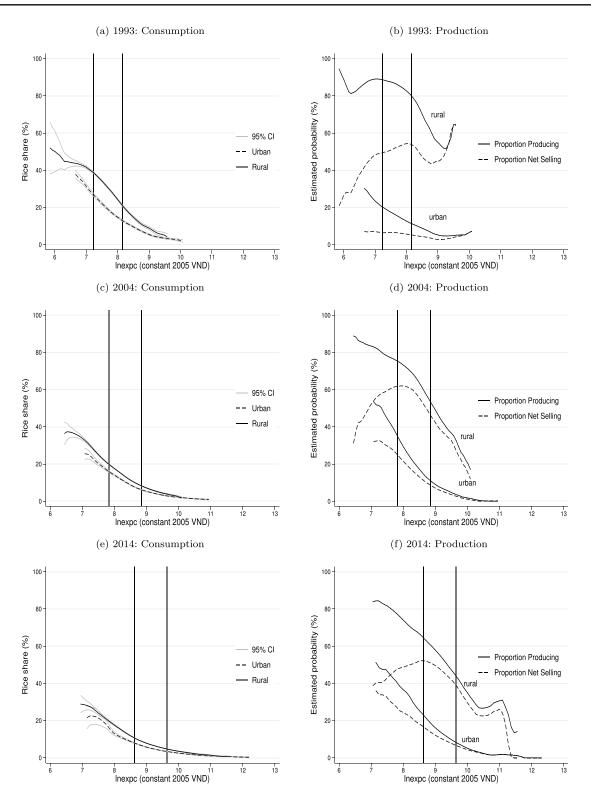
The economic contribution of rice in the transitional economy of Vietnam

Rice is a significant but declining source of income and consumption for Vietnamese households. Specifically, in



Notes: Adapted from Dang et al (2013). (1): MOT sends recommendations to Prime Minister (PM) on rice exports orientation every year; (2): Based on MOT's recommendations, PM gives guidance and delegates MOT to implement it; (3): MOT delegates Vietnam Food Association (VFA) to manage the rice exports; (4): VFA directly manages and directs rice exports; (5): If any issues arise, VFA reports to MOT and the Rice Export Management Working Group for resettlement; (6): Issues beyond the group and relevant ministries' responsibilities are submitted to PM.

Fig. 1 Rice Export Management in Vietnam since 2008. Notes: Adapted from Dang et al. (2013). (1): MOT sends recommendations to Prime Minister (PM) on rice exports orientation every year; (2): Based on MOT's recommendations, PM gives guidance and delegates MOT to implement it; (3): MOT delegates Vietnam Food Association (VFA) to manage the rice exports; (4): VFA directly manages and directs rice exports; (5): If any issues arise, VFA reports to MOT and the Rice Export Management Working Group for resettlement; (6): Issues beyond the group and relevant ministries' responsibilities are submitted to PM



Notes: Authors' estimation. Data are from Vietnam Living Standard Survey (VLSS) 1993, Vietnam Household Living Standard Surveys (VHLSS) in 2004 and 2014. *lnexp* is the logarithm of household expenditure per capita. The two vertical bars represent the 20th and 80th percentile households.

Fig.2 Evolution of rice production and consumption in Vietnam: 1993 – 2014. Notes: Authors' estimation. Data are from Vietnam Living Standard Survey (VLSS) 1993, Vietnam Household Living Standard

Surveys (VHLSS) in 2004 and 2014. *lnexp* is the logarithm of household expenditure per capita. The two vertical bars represent the 20th and 80th percentile households 1993, about 80% rural and 20% urban households were involved in rice production (Fig. 2, panel b). This proportion has reduced during the economic transition, making rice production an activity more likely performed by the poor (panels d and f). On the consumption side, in 1993, rice used to account for about 40% of the household expenditure of the poorest quintile group (panel a) but has reduced substantially ever since, to approximately 10% by 2014 (panel e). Nonetheless, rice has been notably contributing to Vietnamese calorie intake (Table 1), accounting for half of the calorie intake of rural dwellers by 2014. In this context, policies that affect rice consumer or producer prices would have a wide-spread impact on Vietnamese households, especially the rural and poor group.

At the country level, rice has always been an essential commodity, but its economic contribution has also decreased gradually over time. In particular, in the late 1980s and early 1990s, after the launch of economic reforms, starting in agriculture, rice represented a fifth of the country's GDP and a quarter of its total export revenues (FAO 2019). By the mid-2010s, these shares were only 7% and 2%, respectively (FAO 2019). Thus, over the last decade, rice policies have only had a small economic impact on the whole economy (see, for example, Ha et al. (2015)). Nonetheless, rice remains dominant in Vietnam's agriculture – a sector which attracts almost 70% of the country's labour force at the start of the reforms and 44% by 2015 (Fig. 5). Indeed, rice has made a steady contribution of roughly 50% to Vietnam's total agricultural product over the last few decades (Fig. 3). It follows that rice policies are arguably the most effective tool to have a broad-based impact on the income of Vietnam's rural population, of whom many are poor and vulnerable.

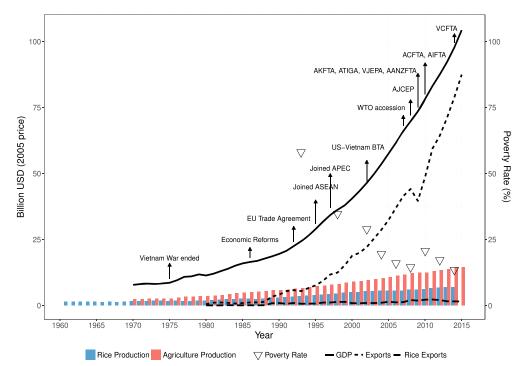
The development of Vietnam rice policy since Doi Moi: socialist policy legacies in the context of market reforms

After Doi Moi, two key de-collectivisation decisions boosted rice production in Vietnam. First, the Land Law that took effect in the January 1988 assigned households the right to use and obtain benefits from the land leased from the State on a long-term basis. Second, the Communist

Table 1The share (%) ofdifferent food groups in thetotal calorie per capita per day:1993 – 2014

	Our estimates			Estimates from other studies					
Item	Country	Urban	Rural	Country (FAO 2019)	Country (Molini 2006)	Urban (Ray 2007)	Rural (Ray 2007)		
1993									
Rice	72	64	74	68	75	76	82		
Cereals	79	71	81	74	78	83	87		
Vegetables	1	1	1	1	na	na	na		
Fruits	3	4	3	3	na	na	na		
Meat	7	9	6	7	na	na	na		
Milk	0	0	0	0	na	na	na		
2004									
Rice	62	53	65	60	na	55	66		
Cereals	67	60	70	65	na	61	71		
Vegetables	2	3	2	2	na	na	na		
Fruits	3	4	3	3	na	na	na		
Meat	13	16	12	11	na	na	na		
Milk	0	1	0	1	na	na	na		
2014									
Rice	46	39	50	51	na	na	na		
Cereals	51	44	55	57	na	na	na		
Vegetables	4	4	4	3	na	na	na		
Fruits	4	4	4	3	na	na	na		
Meat	19	21	19	15	na	na	na		
Milk	1	2	1	1	na	na	na		

Notes: author calculation using VLSS 1993, VHLSS 2004, 2014 and the calorie conversion rates by Le et al. (2013) and used in Thi et al. (2018). Since the estimate by FAO for 2014 is not available, we reported the one for 2013.



Notes: GDP = Gross Domestic Product; VCFTA= Vietnam Chile Free Trade Agreement (FTA); ACFTA=Association of Southeast Asian Nations (ASEAN) China FTA; AIFTA = ASEAN India FTA; AKFTA = ASEAN Korea FTA; ATIGA = ASEAN Trade in Goods Agreement; VJEPA = Vietnam Japan Economic Partnership Agreement; AANZFTA = ASEAN Australia New Zealand FTA; WTO = World Trade Organization; EU = European Union;
Sources: Data are mainly from FAO (2019). They are cross-checked and supplemented for missing values by those from GSO (1997), ITC (2019) and Foure et al (2013).

Fig. 3 High economic growth and great trade openness in parallel with remarkable poverty reduction. Notes: GDP = Gross Domestic Product; VCFTA= Vietnam Chile Free Trade Agreement (FTA); ACFTA=Association of Southeast Asian Nations (ASEAN) China FTA; AIFTA = ASEAN India FTA; AKFTA = ASEAN Korea FTA; ATIGA = ASEAN Trade in Goods Agreement; VJEPA = Vietnam

Japan Economic Partnership Agreement; AANZFTA = ASEAN Australia New Zealand FTA; WTO = World Trade Organization; EU = European Union; Sources: Data are mainly from FAO (2019). They are cross-checked and supplemented for missing values by those from GSO (1997), ITC (2019) and Foure et al. (2013)

Party Politburo's Resolution 10/NQ (Term VI) ended most of the characteristics of the collective farming system, establishing instead a household-based system. Following de-collectivisation, there were initial reforms toward substantial market liberalisation. For example, the food market was liberalised by the party central committee's Resolution 06 (Term VI) issued in 1989 allowing farmers to freely sell their products in the market, at the full market price, after fulfilling their tax obligations. To encourage exports, the exchange rate was unified, state monopoly of foreign trade was eliminated in the same year, and procedures were streamlined to motivate enterprises to export their products. Land use rights of farmers were further extended to include the rights to "exchange, transfer, inheritance, lease, and mortgage" in the Land Law 1993, albeit under a threshold of three hectares to avoid the emergence of large landlords in rural areas.

During this early market liberalisation policy trajectory, however, state control over rice exports was clear, specifically in the form of permitting only state-owned companies to export (IFPRI 1996). Although government's initiatives to free exports among these companies had succeeded in boosting the volume of exports, strong competition among them also lowered Vietnam's export prices and, at times, led to failures in contract execution, thus hurting the country's trading reputation (IFPRI 1996). Under these circumstances, in 1990, the 9th party central committee (Term VI) issued a directive on controlling rice markets and exports, namely to: "...fully control wholesales and organise well the circulation of some key commodities to be able to stabilise prices..;... quickly arrange exports and services organisations (both central and local) ...[to] avoid too much concentration and too much dispersion, ensure strict control of rice exports at the central level...".

This policy counterbalance to market liberalisation continues almost three decades later. In particular control over the wholesale market and exports of rice have been exercised through three key institutions. The first was through state-owned enterprises (SOE). In 1987, the central food SOE (Vinafood) was established, merging all big regional

555

and provincial food companies in order to centrally control food production, distribution, circulation and consumption; a task that had been repeatedly echoed in multiple documents issued by the party's central committee and politburo before this establishment. Given the inherent North-South difference, Vinafood was later separated into Vinafood 1 and Vinafood 2 in 1990 to enhance their effectiveness (Decisions 46-CP and 47-CP dated 17 July 1995). At that time, Vinafood 1 was comprised of all 29 food companies north of Thua Thien Hue while Vinafood 2 had all 31 food companies south of Quang Nam Da Nang (IFPRI 1996). In 1995, these two enterprises were promoted into State Corporations as part of a pilot model which established about 20 such corporations in key sectors of Vietnam (Decision 91-TTg dated 7/3/1994). Since then, Vinafood 1 and 2 have been tasked to "... purchase, preserve, process, provide wholesale and retail sale, reserve, circulate food, agricultural products, to stabilise prices, and ensure national food security ... " (Decisions 609/QD-TTg dated 25/4/2011 and 339/QD-TTg dated 7/3/2011)

The second key institution is the Vietnam Food Association (VFA). Established in 1989,¹ it comprises food producing, processing and trading enterprises, most of which are state-owned. Its mission is to: "... coordinate business activities to protect appropriate rights of members and contribute to ensuring food security, satisfying domestic demands and exporting food to the world market in line with the state policies ... Guide and administer imports and exports of rice and food stuff..." (Regulations of VFA, dated 3/10/2006 issued by Ministry of Home Affairs).

The third key institution is an inter-ministerial management committee which manages rice exports. When first established, this committee was comprised of representatives from Ministries of Trade and Industries (MOIT), Agriculture and Rural Development (MARD), Planning and Investment (MPI), Finance (MOF), State Bank of Vietnam (SBV), the State Price Committee, Government Office, and some key food companies. In 1999, it took on an additional task of managing fertiliser imports, and also included representatives of key rice producing provinces and the chairman of VFA. In July 2008, it was trimmed to include only representatives from MOIT, MARD, MOF, MPI, National Reverses Department and VFA (Fig. 1).

With these three institutions at its disposal, Vietnam has been striving to balance two, at times contradictory, policy objectives. On the one hand, it wants to enhance efficiency in rice exports, which in its turn helps boost rice production, income and employment for many rural dwellers, by liberalising domestic and export rice markets. On the other hand, it aims for social outcomes using the considerable market powers of state-owned exporting companies. Nonetheless, this delicately balanced policy legacy is being challenged by the pressure from Vietnam's increasing integration into the global market which requires compliance with the commitments in bilateral/multilateral trade agreements.

With this in mind, we discuss this dynamic between open economy pressures and sticky if not overly restrictive domestic policy institutions in three stages. The first is 1991-2000 when exports were controlled by quotas. The second is 2001-2008 when quotas were removed, exports were encouraged, and the procedures for exports approval were streamlined. Finally, the third stage is from 2009 to the present when food security emerged as a major concern in the world and fear of increasing inequality has become more tangible and politically sensitive.

Period one: 1991 – 2000

Between 1991 - 2000, Vietnam recorded impressive results in economic development. It was one of the fastest growing economies in the world during 1992-1997: GDP grew at 8%-9.5% while exports grew at about 20% per year (World Bank 1998). The industial sector was the fastest growing sector of the economy while agricultural output doubled compared to before Doi Moi (World Bank 1998). Vietnam also made substantial progress in expanding its trade relations with other countries outside the communist block. Notably, it signed a bilateral trade agreement with the EU in 1992, joined ASEAN in 1995 and APEC in 1997, and prepared for negotiations to become a member of WTO (Fig. 3). However, the Asian financial crisis in 1997–1998 encouraged the party to promote a self-reliant approach to "develop agriculture and rural economy as a firm basis for socio-economic stability and development in any circumstances" (Resolution 05-NQ/TW, 17/10/1998). This approach was added to the overall development view of the party for this period, namely that "food production plays an important role to satisfy basic needs of the people and ensure social stability" (Resolution 05-NQ/HNTW, 10/6/1993).

During this period, rice exports were controlled by quotas while unregistered exports were strictly prohibited. By 1994, there were about 50 rice exporting companies, of whom 15 were called 'key rice exporting companies'. The biggest exporter was Vinafood 2, which accounted for a quarter of Vietnam's total rice exports. The next 14 largest exporting SOEs accounted for 57% of the total quota (Inter-ministerial Circular 02/TTLB/NN-TM, 06/02/1995). Quotas were also allocated to provincial food SOEs based

¹It was called Vietnam's Food Imports Exports Association when first established by Decision 727/KDDN-QD dated 13/11/1989, following Decision 64-HDBT on the management of imports and exports by the Council of Ministers. Its name was changed in 1999 by Decision 33/1999/QD-BTCCBCP dated 26/08/1999. Its latest regulations were promulgated in 2006.

on their provinces' rice output. Specifically, provinces with an output of 600 thousand tons or more had two provincial SOEs granted with a quota while those with 200-600 thousand tons had only one.

In 1995, market power in rice was further concentrated in Vinafood 2 when it was promoted into a stateowned corporation (together with Vinafood 1). These two central SOEs are among Vietnam's first 22 state-owned corporations, being established to ensure the leading role of the state in the process of industrialising and modernising the economy. Key rice exporting companies thus now were comprised of only Vinafood 1, Vinafood 2, and some the provincial SOEs in major rice-producing provinces. In 1996, 80% of the quotas were allocated to Vinafood 2 alone for it to allocate among its subsidiaries (Dang et al. 2013).

In 1997, a more decentralised management mechanism was put in place, possibly due to the push-back of key rice producing provinces against the concentration of power in Vinafood 2. In particular, the government allocated only 30-40% of the quotas to central SOEs. The remaining 60-70% were assigned to major rice-producing provinces, allowing them to redistribute shares among their provincial SOEs (Dang et al. (2013), Decision 0089/TM-XNK). The power of major rice producing provinces² was further consolidated via their official representation in the rice export and fertiliser import steering committee established in 1999. In this committee, VFA presented the views of all SOEs members. Although the central SOEs lost their seats on the steering committee, their Chief Executive Officers (CEOs) normally took turns to lead VFA, and they had a substantial influence on all decisions made by VFA due to the number of votes their subsidiaries had in this organisation.

In 1998, Vietnam further reformed its rice exports sector by allowing entry from non-state-owned enterprises. In the short term, the reforms were designed to boost exports in the economy whose growth rate fell to less than 6%, from more than 8%, per annum due to the 1997 Asian Financial Crisis. In the medium term, these non-state-owned enterprises were seen as necessary to prepare the economy for its likely commitments in future trade agreements. Specifically, 'regardless of ownership, any enterprises with business licences in food or agricultural products, can export rice' (Decision 12/1998/QD-TTg, dated 23/1/1998). Another reform was in exports registration which was replaced by an approval system to streamline the procedures for granting permission to export rice. Reforms were also taken to allow food and agricultural products producers and traders to have better and more direct access to the world market (Minot and Goletti 2000). Finally, Vietnam set up

an Exports Support Fund³ to provide price support to the exports of agricultural products and to begin using export taxes in a more flexible manner.

However, the effects of the reforms in 1998 were shortlived as they were counteracted by the changes in rice export management, which further enhanced the market power of Vinafood 1 and 2. In particular, these two central SOEs were permitted to sign all rice exporting contracts under government-to-government (G2G) agreements, or those influenced by the government. These contracts accounted for 50-60% of Vietnam's total rice exports (Dang et al. 2013). They were also protected against competition from other Vietnamese rice exporters in these markets. After signing these G2G contracts, the two central SOEs were allowed to export up to 30% of the contract quantity of rice and entrusted the remaining 70% to other exporting SOEs in exchange for up to a 0.5% commission (Document 12/TM-XNK dated 17/03/2000).

Moreover, in addition to nurturing the market power of these SOEs, in order to control the rice market, the government had two specific policy tools to dictate prices at which rice was sold domestically and overseas. They included the "floor" and "ceiling" domestic rice price which was determined by the State Price Commission, and the "floor price" for rice exports which was determined by MOIT based on the world rice price. For the latter, rice was allowed to be exported if sold at a price equal to or higher than the "floor price" (ACI 2002).

With this type of control in the rice sector, the government fully governed the wholesale and export rice market as directed by the 9th Party central committee (discussed above). This apparently suited an economy in transition from a command to a socialist-oriented market economy; one where the development of a society with social equality remained a key goal. Such control was established without many countervailing pressures given the inherent characteristics of a command economy and the relatively 'closed' nature of the economy during this period, with only two trade agreements with ASEAN and the EU (on textiles alone) (Fig. 3). In this economy, SOEs were assigned to coordinate production and demand to ensure sufficient rice for domestic consumption, and then export the surplus. This coordination itself was deemed necessary because Vietnam as the whole can produce much more rice than its demand; although except for the Mekong and Red River deltas, all

²These provinces included Long An, An Giang, Kien Giang, Tien Giang, Dong Thap, Can Tho and Vinh Long, all in Mekong river delta.

³Being established in September 1999, this fund aimed to cover the bank interest for the purchase of agricultural commodities when the world price fell, having adverse effects on domestic production; reserve agricultural products for exports; and provide finite financial support for losses in exports activities of some commodities due to exogenous risks or the lack of competitiveness (Decision 195/1999/QD-TTg dated 27/9/1999).

regions are either food deficit or self-sufficient regions. Meanwhile, the "floor prices" of rice exports and domestic 'floor' and 'ceiling' prices helped stabilise domestic prices and balance the interests of different population groups, especially the consumer and producer. Furthermore, in the absence of an effective tax system, controlling producer prices while allowing monopoly SOEs to sell rice at higher prices was also found to help the government raise revenues (Ghosh and Whalley 2004). To this end, economic growth was promoted while social equality was maintained.

The broad-based growth in Vietnam during this period lends support to this form of governance. As seen in Fig. 3, the economy grew steadily with rice making a substantial contribution, and the national poverty rate was halved from 1993 to 2002 (Table 2). While much of the economic progress was due to earlier land reforms and market liberalisation (World Bank 2003), the lack of rising inequality seen in the relatively stable Gini coefficient values (Table 2), as often witnessed in transitional economies, was partly attributable to this type of governance.

Concluding this subsection, it is worth noting that this governance was not the most efficient in economic terms. It created fragmentation with substantial rice price differentials across regions due to the inter-regional market control by SOEs (Minot and Goletti 1998; Baulch et al. 2008) and, more importantly, lucrative opportunities for rent-seeking, group-interest promotion, and corruption which became much more evident in later stages.

Period two: 2001-2008

In this period, Vietnam started to integrate quickly into the world economy. Two critical benchmarks in this episode were the US-Vietnam bilateral trade agreement signed in December 2001 and the country's accession to the WTO in 2007 (Fig. 3). Not only did these trade agreements boost the economy by expanding export markets, but they also necessitated a wave of domestic reforms to modernise its governance in line with international practices in a market-based economy. As a result, the economy's competitiveness was enhanced and an enabling and level-playing field for enterprises to do business was gradually put in place.

This period witnessed considerable economic growth with inclusive patterns. GDP grew at a high and steady rate of 6%–7% per annum before the financial and food crises in 2007-08 (World Bank 2011). Securities trading centres were established to mobilise capital for the economy with stock market capitalisation skyrocketing from 2% to 40% of GDP during 2005–2007 (World Bank 2008). At the same time, the national poverty rate continued to fall sharply, being halved from 2002 to 2008, while Gini coefficients fell from 37% in 2002 to 35.6 in 2008 (Table 2).

Vietnam's rice-related policies made a substantial contribution to this inclusive growth due to its socialist policy legacies. On the input front, agricultural land, especially rice land, was protected against rapid urbanisation and modernisation, as directed by the party's Resolution 05-NQ/TW issued in 1998. For the first time, rice land was classified separately from annual agricultural land in the 2001 Land Law revision, by which farmers were not allowed to plant any crops other than rice in their rice-designated land. On the other hand, to boost rice production via mechanisation and economies of scale, the limit on land allocation and transfers was increased in 2007, albeit moderately, from three to six hectares in the Mekong River region and four hectares in the rest of the country (the National Assembly's Resolution 1126/2007/NQ-UBTVQH11).

For market management, the socialist strategy appeared in a much subtle form. In May 2001, Vietnam removed the quota system and encouraged enterprises of all types of economic ownership to export rice and agricultural products a move which at least appeared to comply with international practices. Nonetheless, the government's quantity control of rice exports remained virtually unchanged (Ha et al. 2015). The quota system was merely transformed into a system of annual export targets which have been found to be restrictive and binding (Nielsen 2003). In this new system, VFA became a 'super civil association' with the authority to approve export contracts, both in quantity and price. As such, it 'guided' floor export prices so that rice was sold "at a reasonable price for domestic consumers, profitable for farmers and business-efficient for exporting enterprises" (Regulations of VFA issued by Ministry of Home Affairs, 3/10/2006). It also provided advice to MOIT, a ministry that

Table 2Progress in povertyand changes in inequality overtime (%)

	1993	1998	2002	2004	2006	2008	2010	2012	2014	2016
Poverty rates										
Country	58.1	34.7	28.9	19.5	16	14.5	20.7	17.2	13.5	9.8
Urban	25.1	9.2	6.6	3.6	3.9	3.3	6.0	5.4	3.8	1.6
Rural	66.4	45.5	35.6	25	20.4	18.7	27	22.1	18.6	13.6
Gini indices										
Country	35.7	35.4	37	36.8	35.8	35.6	39.3	35.7	34.8	35.3

Sources: VASS (2011) and World Bank (2018)

acted on behalf of the Government, on determining which enterprises were allowed to sign G2G contracts, and how to allocate these contracts to key rice producing provinces after considering the benefits accruing to the signing enterprises. Its chairman also often held the leadership position of a central SOE, making it difficult to determine which interest that VFA represented. In addition, on top of this system, sat the absolute power of the prime minister to take any necessary measures to intervene in the rice market to *'ensure the benefits for farmers, stabilise agricultural production and the domestic market, and reduce the burden in rice production and circulation in the face of price fluctuations in domestic and international markets' (Decision 46/2001/QD-TTg, 04/04/2001).*

In effect, there was thus very little diminution of the market power of rice exporting SOEs despite the reforms. Precise estimates of the central SOEs' share in the rice export market are not readily available and vary by year, but patchy evidence is revealing. For example, Vinafood 2 accounted for 42% and 36% of total rice exports in 2007 and 2008, respectively, while the corresponding numbers were 9% and 11% for Vinafood 1 (Pham and Nguyen 2009; Tsukada 2011). In the period 2010-2015, the two central SOEs accounted for about 60% of the total export quantity of rice (Baomoi 2017).

In 2008, the harsh experience of the rice crisis had raised serious questions about governance in Vietnam's rice sector. Needless to say, Vietnam's two rice export bans, imposed from September 2007 to January 2008 and from 25th March until June 2008, were among key factors triggering the world rice crisis (Martin and Anderson 2011; Childs and Kiawu 2009). At the country level, however, these policy interventions apparently failed to achieve any stated social policy objectives: namely, to guarantee purchases of all paddy at reasonable prices or at profitable levels to farmers; to ensure food security in any circumstance, and to stabilise domestic prices at an appropriate level (Government of Vietnam 2008). In particular, Tran et al. (2013) found that farmers gained little from the rice price spikes due to the export bans and the increase in input prices, especially fertiliser. Food security was also not assured, in terms of both availability and affordability, and supplies of rice in stores effectively disappeared throughout the country,⁴ due partly to panic hoarding by consumers and speculative delays in sales by rice wholesalers. During the effective time of export bans, especially in April and May 2008, prices of staple foods increased in the range of 6 to 22 percent compared to about two percent for non-staple foods (General Statistic Office 2008). Admittedly, we do not know the true impact of the bans on rice prices when the control (no-ban) scenario is not available. However, the sharp increase of rice prices in the context of the government having almost full control of the wholesale and export rice markets and the absence of adverse shocks on the rice supply side does not lend any credence to the government's ability to achieve the social objectives of the rice policy. Indeed, the poorer a household was, the more it was hurt by the export bans (Ha et al. 2015).

Nonetheless, quite a few respondents were confident of the state's capacity to stabilise the country's domestic rice market. As one of them said: "The domestic [rice] market can be totally stabilised with just one command by the government. Rice price fever in Vietnam [in 2008] was due to market psychology, not the lack of rice since rice exports did not account for a large share of Vietnam's 45million-ton-paddy output.... I think the government did not need to ban the signing of new exports contracts in 2008." In contrast, some interviewees were highly critical of the government's interventions in 2008, saying that "it was a failure!".

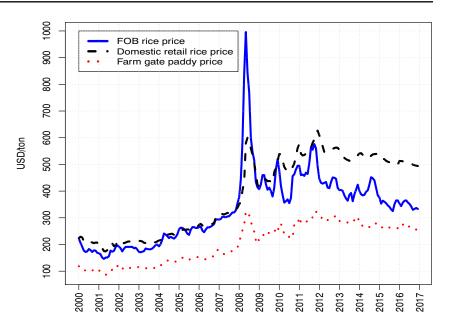
Indeed, the crisis also revealed substantial pressure on the socialist-oriented governance regime in rice management, along with the particular and special interests of rice exporting SOEs. There is ample evidence that the government's interventions in the country's rice exports were made mostly in favour of the central SOEs, noting their strong influence on Vietnam's rice policy via VFA (RFA 2009; Fulton and Reynolds 2015). Slayton (2009) argues that the export bans were at least partially profit-driven since the G2G sales were still allowed through Vinafood 1 and 2 in spite of the bans. Tran et al. (2013) also found that SOEs were the ones who benefited most from rice price spikes. For the export contract of 1000 ton of rice signed by Vinafood 2 with the Philippines at the price of \$US1.2/kg rice in April 2008, for example, farmers were paid only roughly \$US 0.47/kg (Agroinfo 2009) or just a third of the export price. The usual mark-up, however, is only about 70% of the farm gate price (Fig. 4).

Period three: 2009-present

Vietnam's integration into the world economy was greatly boosted by its accession to the WTO in 2007. The country was among the fastest-growing economies in terms of trade during 2005-2015 (WTO 2016). By 2016, it ranked as 5th in the world in terms of openness, measured by the ratio of the sum of imports and exports over GDP (World Bank 2017). Although agriculture and fishery products only account for 13-15% of Vietnam's total export value (World Bank 2016), they are critical for social outcomes since 43% of the country's labour force remained involved in this sector by 2016 (Fig. 5). Since 2011, rice export revenues have slowed down, but strong export performance has been

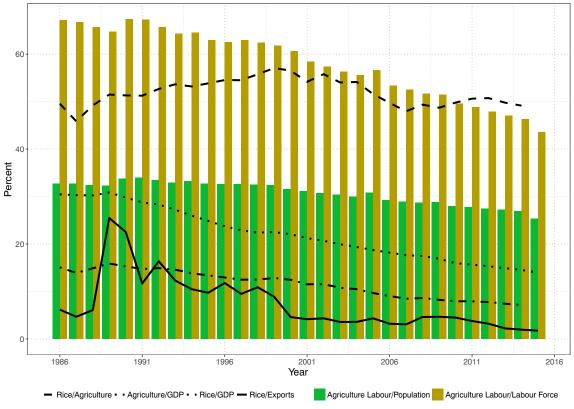
⁴See Ha et al. (2015) for a comprehensive review.

Fig. 4 FOB, domestic retail rice prices and farm gate paddy price. Sources: FOB prices are from IRRI (2017), domestic retail rice price and farm gate paddy price in Mekong region are from GSO (2017), exchange rates are from IFS (2017)



seen in other agricultural products such as vegetables and fruits, coffee, black pepper, cashew nuts, rubber and seafood (World Bank 2016).

In this period, a severe challenge emerged to maintaining an appropriate policy balance between economic efficiency and social equality. The contribution to GDP from agriculture fell much quicker, especially since the early 2000s, than the rate of labour moving out of agriculture (Fig. 3). As a result, productivity per worker in agriculture lagged behind other sectors, thus widening the gap in wages



Notes: GDP = Gross Domestic Product.

Fig. 5 Share of rice, agriculture and labour (percent). Notes: GDP = Gross Domestic Product. Sources: Data are mainly from FAO (2019). They are cross-checked and supplemented for missing values by those from GSO (1997), ITC (2019) and Foure et al. (2013)

and incomes between agriculture and non-agricultural sectors, and increasing urban-rural and ethnic majorityminority inequality (World Bank 2012; Nguyen et al. 2017). This situation called for further reforms in agriculture to enhance economic efficiency. Furthermore, inequality within rural areas has become dominant in the national debate due to the shift in production activities away from agriculture to non-agricultural sectors, and from lowerskilled to higher-skilled work (World Bank 2012).

With this in mind, in 2008, the Tenth Party Congress focused its attention on three issues surrounding agriculture, rural areas and farmers (the so-called "tam nong" issue). It issued Resolution 26-NQ/TW, emphasising that 'tam nong' was the basis and an important force for socio-economic development and *maintaining political stability* in Vietnam. It highlighted the need to *increase farmers' income, reduce inequality and ensure food security, especially in rice production*.

The implementation of Resolution 26-NQ/TW was carried out on two fronts: economic efficiency and social equality. For the former, the party directed efforts to "restructuring the agricultural sector to enhance its value-added and sustainable development to increase farmers' income". In particular, the focus was on: exploiting Vietnam's comparative advantages in agricultural commodities; encouraging private sector investment, specialisation and large-scale production to enhance productivity and efficiency in agriculture (Decision 899/QD-TTg in 2013); and introducing bold land reforms. The most important initiative was the 2013 revised Land Law that allowed farmers to accumulate up to 30 and 20 hectares (from 6 and 4 hectares) of annual land including rice land in the Mekong river delta and other regions, respectively; and 100 hectares and 300 hectares (from 20 and 50 hectares) of perennial land in the deltas and highlands/mountainous areas, respectively. These new thresholds were probably the most compelling evidence of a major shift in the mindset of Vietnamese leaders who were, until then, particularly concerned about the emergence of landlord and landless classes in rural Vietnam, as it contradicted their socialist-orientation, thus posing a threat to the country's political stability.

On the social equality front, rice policies have become a principal tool. This makes sense since inequality has been on the rise, albeit more in people's view (World Bank 2012) than shown by data (Table 2), and Vietnam lacks a comprehensive social safety net and an effective income tax system. Meanwhile, rice policies have a broad-base impact.

With this in mind, two key bundles of policies have been implemented. The first aimed to achieve food security over a long time horizon by specifying the amount of rice land to be protected, considering the nation's demand by 2030 (Decree 63/ND-CP in 2009, Resolution 17/2011/QH13 in

2011).⁵ In the rice designated area, farmers are not allowed to plant any crops other than rice even if it is feasible to do so, and therefore, they likely have much lower returns compared with their counterparts who can do otherwise (Markussen et al. 2011; Giesecke et al. 2013). To address this potential source of inequality, cash transfers of about \$20/ha and \$10/ha, for wet rice land and dry rice land, respectively, were provided to farmers briefly during 2012-2015 (Decree 35/2015/ND-CP).

The second bundle of policies sought to guarantee a stable and reasonable income for rice farmers, many of whom are poor. Accordingly, the government invested in building sizeable temporary storage depots to store paddy purchased from farmers during the harvest time (Decision 1518/QD-TTg, 2009). SOEs which performed such rice purchases received loans with subsidised interest rates for the first few years. Furthermore, some regulations were issued to ensure a 30% profit for rice farmers (Document 430/TTg-KTN, 2010), such as the listing of rice among 11 essential commodities that had been under the state price regulation since 2012 (Price Law, 2012). Of paramount importance to the state capacity of controlling rice prices were the central food SOEs which were mandated to play a key role in purchasing agricultural products for farmers, regulate and stabilise markets, supply farmers with necessary goods in the case of natural disasters (Decree 63/ND-CP, 2009).

Our interview data support an assessment that these policies were largely effective. For example, 43% of our respondents agreed that rice prices had been stable over the past five years. Empirical data corroborate this steady trend in both retail and farm gate rice prices against a much more fluctuating free-on-board (FOB) rice price for Vietnam (Fig. 4). At the farm level, farmers reported receiving some cash transferred from the government. Meanwhile, 45% of respondents agreed on the dominance of the two central SOEs in Vietnam's rice exports, wholesale and interregional markets. Responses from traders also indicated the substantial influence of rice exporting companies on farm-gate rice prices, confirming the potential impact of government interventions on farmers' income via SOEs.

However, our interviewees were divided when it came to the implementation of the 30%-profit-for-farmers policy. A rice expert respondent (category 4) was highly skeptical, saying "ensuring 30% profit for farmers is very difficult since rice prices are currently market-based, depending on demand and supply, so a 30%-profit goal for farmers is just an estimate. To provide farmers with a fixed profit margin,

⁵Chu et al. (2017) find that economic efficiency would be enhanced if about 13% of the proposed protected cultivated rice land is released to other crops, but this release is pro-rich, implying a trade-off between economic efficiency and inequality in Vietnam

the government has to buy rice directly from farmers as done in India or Thailand at some point in the past. Therefore, saying "a 30% profit for farmers is purely demagogic, because there are no direct measures to achieve this goal." On the other hand, an elite respondent (category 1) interpreted this objective as being implemented only when there was substantial price fluctuation in the market, not on a regular basis.

Meanwhile, interviewed rice farmers (category 6) did not believe that the government had done enough to make rice production sufficiently profitable for them, and SOEs captured the gain from the rice price stabilising policy since they received direct support from the government to purchase rice. This belief has been echoed in the interviews by Tran et al. (2013). However, in our study, only 27% of respondents believed that the primary beneficiary of rice policies was SOEs, while this rate was 36% for rice farmers.

No matter who benefits more from the socialist rice policies, farmers or SOEs, the loser are Vietnamese consumers, many of whom are poor urban immigrants. The wedge between the retail rice price and the farm gate rice price has been widening since 2009, while it has been shrinking in the case of the export rice price (Fig. 4). Admittedly, it is hard to compare the retail price with the export price since different costs and mark-ups are associated with the two different markets. But clearly, it has been more expensive to buy Vietnamese rice domestically while the opposite has been true overseas.

Interview responses show that this economicallyinefficient market situation is likely to persist, at least in the foreseeable future. As noted by a rice expert respondent (category 4): "rice exports still play an important role because some people can only live on rice production. Therefore, keeping them planting rice is maintaining social stability. Rice is indeed a strategic and political commodity." Agreeing with this view, another rice expert respondent added: "even if Vietnam suffers from a loss in exporting rice, we still have to do so to get rid of our rice surplus. And rice surplus is certain since we have a comparative advantage in producing rice, and rice is a political commodity, the output of which cannot be reduced immediately."

In contrast, some respondents in Hanoi (categories 1 and 4) attributed this market price discrepancy to the difference in varieties and processing of rice. However, their argument ran counter to responses by rice farmers (category 6) in the Mekong river delta, where 50% of Vietnam's total rice output and 90% of its total exports is produced. In particular, the farmers-respondents said that they were not aware of any rice varieties planted specifically for any markets. In parallel, 50% of respondents from traders and exporting companies (categories 5 and 2) also said that they could not identify any differences either. If any, exported rice was polished more than that sold for the domestic market.

Explaining why Vietnam's exports rice price was low, one rice expert respondent (category 4) said: "Vietnam has to bid low in international rice auctions to compete with Thailand ... this [price discrepancy] implies a subsidy for foreign consumers. In reality, currently, farmers are inclined to abandon their farm, or cultivating it at a moderate level, thus producing rice of low quality. Therefore, the subsidy [to foreign customers] is also an indirect subsidy to Vietnamese rice producers because we need to sell their low-quality rice."

Responses by farmers also confirm the social dimension of rice policies. Two-thirds of farmer-respondents said that they would maintain the same level of rice production. The reason was mostly to ensure food security for the family and create employment for older adults who cannot do other jobs.

On the policy choice to protect rice producers at the expense of rice consumers, one rice expert respondent (category 4) explained: "There is no need to support consumers. The urban poor need not to be supported As rice consumption is falling, the increase in rice price is negligible compared with the fall in rice consumption. Therefore, the urban poor face little difficulty in buying rice. On the other hand, to achieve food security, it is necessary to support poor rice producers in remote areas. As Vietnam's [agricultural] land has been allocated to farmers based on their household labour force, supporting farmers allows them to produce rice for their consumption even when they cannot afford to buy rice." An elite interviewee (category 1) justified this policy choice as follows: "as yearly rice consumption per person falls, and the share of rice consumption is small in the total household consumption, Vietnamese consumers do not care about rice price." Meanwhile, the subsidy to overseas consumers does not seem to come from the government since rice policies cause little fiscal burden, according to interviewed MOF officials.

Needless to say, the socialist objectives in rice policies has put Vietnam at odds with its international commitments. On the one hand, Vietnam cannot regulate domestic rice prices without controlling the domestic wholesale market and the nation's rice export quantity. On the other hand, a commitment to WTO accession requires Vietnam to open its rice market to foreign-owned companies from January 2011. This commitment made it difficult for the one-party state to implement its socialist rice policies.

Vietnam has managed this policy conflict in two principal ways. First, it curbs the growth of rice exporters by creating a substantial barrier to market entry. To become a rice exporter, an enterprise needs to own at least one depot with a storage capacity of at least 5000-ton paddy and one milling factory with a production capacity of at least 10-ton paddy/hour. These two facilities must be located in a province/city that has a rice surplus for exports or a seaport at the time it applies for a rice export business licence (Decree 109/2010/ND-CP in 2010). This requirement implies a significant upfront investment that many enterprises are not willing to make unless their profit is guaranteed. The second way is to allow a strong influence of central SOEs on VFA, which is the *de facto* regulator of Vietnam's rice market. The general director of Vinafood 2 had been the chairman of VFA since 2006. The exception was for the year 2014 when the chairman of VFA was a director of Tra Vinh Food company, a subsidiary of Vinafood 2. As a rice expert interviewee said: "VFA is in essence Vinafood 2".

However, not all respondents agreed with the government approach. One rice expert respondent commented: "the general trend now is to reduce the obstacles to business in all sectors including rice. At the moment, the Decree 109/2010/ND-CP does not create a level-playing field for enterprises who want to participate in rice exports. In particular, it specifies requirements as barriers to entry, thus creating a monopoly for a group of enterprises. As monopoly is harmful to both the government and farmers, it needs to be excluded."

Meanwhile, some other respondents attributed the setup of this barrier to market entry as a behaviour of 'the special interest group'. One rice expert interviewee recalled: "During the development of the Decree 109, Vinafood proposed the requirement on facilities ... doing so was to prevent other enterprises from participating in the rice market. Smaller enterprises have to pay Vinafood for using their export licences, just adding another layer to the value chain and increasing the transaction cost." An elite interviewee (category 1) noted: "private companies in the South have connections. For example, the company owner is a relative of Vinafood 2's leaders or someone who used to work for Vinafood 2. Therefore, if the domestic retail price gets higher, these private companies ... will benefit while consumers will be worse off. The farmers do not benefit because the farm gate price can increase, but by less than the retail price."

We conclude this section by noting that rice policies have become a tool for redistribution as Vietnam became richer. Their collateral cost appears to be born by Vietnamese consumers, many of whom are urban poor. Given the party in pursuit of both economic growth and inclusive development, any reforms in the rice sector, though under the external pressure of commitments in trade agreements, will likely be affected by political and socialist objectives.

This paper presents a narrative of the political economy of

rice policy in Vietnam during its transition to a market-based

Conclusion

economy. The story bears implications not only for Vietnam, but also for the world because the country is a top rice exporter in a world market, in which power concentrates in a handful of countries, and rice is arguably among the most important agricultural commodities.

Implications for Vietnam's socio-economic development and for the world's food security

Vietnam's use of rice policy for social objectives appears a convenient option given the broad-based economic importance of rice and the country's current lack of an adequate social safety net. Nonetheless, we think it remains an ad-hoc instrument that potentially leaves room for special interest group behaviour. Therefore, it might be best that all benefits and costs induced by the policy, especially in inequality, urban poverty and country-wide allocation of resources, are fully evaluated to guide policy formulation in the future.

For the world, Vietnam's rice policy has resulted in rice surplus with cheaper (than domestic) prices since 2012 (Fig. 4). In that sense, this policy is beneficial to the world's food security by making more and cheaper rice available. But it also brings about enormous uncertainties since the policy distorts the market and it will likely be removed when its cost outweighs its benefits or a more effective income redistributive mechanism emerges as Vietnam develops.

Contributions to the literature

The stickiness in Vietnam's rice policy represents an influential case study of policy exceptionalism in the agriculture sector in developing countries. Our findings suggest that the rice sector in Vietnam remains resistant to reforms despite Vietnam's commitments to the WTO and the open economy pressures forcing change elsewhere in the economy. We have identified and catalogued several sources for this policy exceptionalism, where three key institutions of state control of Vietnam's rice sector endure and adapt to changing domestic and international market conditions. Despite economic policy analysis suggesting welfare-improving reforms, the communist party's political survival and implementation of its socialist goals are inextricably bound up with rice as a commodity. The paper has provided a distinctive and historical political economy of policy exceptionalism not currently acknowledged in the literature. Far from being a small economic sector on the margins of advanced industrial countries policy agenda, central to our analysis are the objectives of the ruling (and only) communist party in the country's socio-economic development and the institutional arrangements need to serve those objectives in a more integrated trading world. We argue that rice policy formulation, which involves the party's top leadership, is critical to the party's political survival, and underpins Vietnam's development story in the past, and likely in the future. Rice policy remains exceptional but also essential.

Compliance with Ethical Standards

Conflict of interests The authors declared that they have no conflict of interest.

Appendix

This Appendix provides details on the interviews carried out by the authors and the household survey data collected by the General Statistical Office (GSO) of Vietnam.

Interviews

Our sample of respondents for our interviews was selected from six categories based on desk research on the structure of Vietnam's rice market. Category 1 consists of policymakers from agencies that have been in charge of regulating the market since 2008 (Fig. 1). Given the decentralisation in the country, we interviewed officials from both the central and provincial government levels. Respondents came from the Government Office, ministries of Finance (MOF), Trade and Industry (MOIT), Agriculture and Rural Development (MARD), and an 'industry' association, the Vietnam Food Association (VFA).

In category 2 are food export companies, the most important of which are the Vietnam Northern Food Corporation (VNF1) and Vietnam Southern Food Corporation (VNF2). They are not only the largest trading food companies, but as state-owned enterprises serve as an essential tool of the government to control Vietnam's rice market. In addition to these two companies, we interviewed state-owned

Table 3	Interview	contents	by	group
---------	-----------	----------	----	-------

provincial food companies because they are crucial to the implementation of rice policies at the provincial level. The sample of category 2 also included some private rice companies to investigate any discrimination in treatment towards them due to their ownership status.

The sample in category 3 was selected to explore the widespread support that rice-exporting companies and farmers receive in terms of subsidised credit and interest. Hence we approached the State Bank of Vietnam (SBV), the key decision-maker, and the Bank for Agriculture and Rural Development (Agribank) as a primary policy executing agency in this regard. A few commercial banks were also included in our sample to get diversity in opinions.

In category 4, we interviewed representatives from academia and non-governmental agencies (NGOs) to get their independent views. To investigate the effects of Vietnam's institutions in the rice market, we carried out systematic interviews with wholesalers, millers, and collectors (category 5), and farmers (category 6) selected in key rice-producing provinces, namely Can Tho and An Giang in the Mekong river delta and Nam Dinh in the Red river delta. These groups had large, medium and small size entities to ensure diversity in perspectives. The interview content discussed with each category is shown in Appendix Table 1. This content has been designed based on the role and responsibility in the rice market of different stakeholders. We used two kinds of questions, namely open-ended and closed. The former was applied mostly to elite interviews with policymakers, banks and academia while the latter was used for categories 5 and 6. A combination of them was asked in interviews with rice exporting companies. The interviews took place on December 2016 and January 2017. As seen in Appendix Table 4, we succeeded in reaching almost all planned interviewees. Among those we failed to interview were VFA and VNF2, who refused to participate in our study.

		Category							
No	Interview content	Central government	Provincial government	Food exporting companies	Banks	Acade-mia and NGO	Traders	Rice farmers	
1	Rice policy objectives	Х	Х			Х			
2	Rice policy formulation and implementation	Х	Х			Х			
3	Market stabilizing tools	Х	Х			Х			
4	Government support to the rice sector	Х	Х	Х	Х	Х	Х	Х	
5	Domestic versus exports rice markets		Х	Х		Х	Х	Х	
6	Challenges in doing business			Х		Х	Х		

Household Living Standard Survey Data

Vietnam's Household Living Standard surveys (VHLSS) were carried by the General Statistical Office (GSO) of Vietnam. The first survey was in 1993, with 4800 households interviewed, all of whom were included in the second survey five years later, together with an additional 1200 families. Since 2002, GSO surveyed households on a biennial basis. The sample size was increased to almost 30,000 households in 2002 but then reduced to about 9000 since 2004. All surveys are nationally representative, with the master sample being updated every ten years, based on population censuses. The core modules of these surveys are household comprehensive income and expenditure, which are hardly changed over time. Therefore, statistics using

gory
ç

Agencies	Intended	Actual				
	interviews	interviews				
Category 1: Central agencies						
Government Office	1	1				
Ministry of Industry and Trade	3	1				
Ministry of Finance	3	2				
Ministry of Agriculture	4	4				
and Rural Development						
Vietnam Food Association	2	0				
Category 1: Provincial agencies						
Provincial People's Committee	3	3				
Department of Industry and Trade	3	3				
Department of Finance	3	2				
Department of Agriculture	3	3				
and Rural Development						
Category 2: Rice exporting						
companies						
Vinafood 1	1	1				
Vinafood 2	1	0				
State-owned provincial food	3	3				
companies						
Private companies	10	9				
Category 3: Banks						
State Bank of Vietnam	2	1				
Agribank	1	1				
Other commercial banks	2	1				
Category 4: Academia and	10	11				
non-governmental organisations						
Category 5: Traders						
Wholesalers and millers	6	5				
Collectors	9	7				
Category 6: Rice farmers	15	15				
Total number of interviewees	85	73				

the data on income and expenditure are comparable across years. Description of the surveys and their results can be found on the website of the World Bank and GSO (e.g. GSO (2014), GSO (2016), and GSO (2017)).

References

- ACI (2002). Rice value chain study: Vietnam. Agrifood Consulting International (ACI): A report prepared for the World Bank.
- Agroinfo (2009). Sometimes our rice sneaks to thailand [co luc gao ta chui lui sang thai]. Available at http://agro.gov.vn/vn/tID13914_ Co-luc-gao-ta-chui-lui-sang-Thai.html, Accessed: 20/10/2017.
- Baomoi (2017). Food association: Power manipulated for local interests [hiep hoi luong thuc: quyen luc bi thao tung vi quyen loi cuc bo]. Online Baomoi. Available at https://www.baomoi.com/ hiep-hoi-luong-thuc-quyen-luc-bi-thao-tung-vi-quyen-loi-cuc-bo/ c/21683952.epi. Accessed: 30/10/2017.
- Baulch, B., Hansen, H., Trung, L., Tam, T. (2008). The spatial integration of paddy markets in vietnam. *Journal of Agricultural Economics*, 59(2), 271–295.
- Childs, N., & Kiawu, J. (2009). Factors behind the rise in global rice prices in 2008. US Department of Agriculture, Economic Research Service.
- Chu, L., Nguyen, H. T. M., Kompas, T., Dang, K., Trinh, B. (2017). Optimal rice land protection in a command economy. Crawford School Research Paper No. 1707.
- Dang, K.S., Nguyen, D.AT., Nguyen, A.P., Nguyen, T.TN. (2013). Vietnam's rice development and trade management policy. Institute of Policy and Strategy for Agriculture and Rural Development: unpublished manuscript.
- Daugbjerg, C., & Feindt, P. H. (2017). Post-exceptionalism in public policy: Transforming food and agricultural policy. *Journal of European Public Policy*, 24, 1–20.
- Daugbjerg, C., Farsund, A. A., Langhelle, O. (2017). The resilience of paradigm mixes: food security in a post-exceptionalist trade regime. *Journal of European Public Policy*, 24, 1–18.
- Dawe, D. (2010). *The rice crisis: Markets, policies and food security*. London: Earthscan.
- Dixon, J.A., Gibbon, D.P., Gulliver, A. (2001). Farming systems and poverty: Improving farmers' livelihoods in a changing world. Rome and Washington D.C. : Food & Agriculture Organization and the World Bank.
- FAO (2019). Faostat. Available from http://faostat3.fao.org/home/E [Accessed: 23 March, 2019].
- Foure, J., Benassy-Quere, A., Fontagne, L. (2013). Modelling the world economy at the 2050 horizon. *Economics of Transition and Institutional Change*, 21(4), 617–654. http://www.cepii.fr/cepii/ en/bdd_modele/versions.asp?id=11.
- Fulton, M.E., & Reynolds, T. (2015). The political economy of food price volatility: The case of vietnam and rice. *American Journal* of Agricultural Economics, 97(4), 1206–1226. https://doi.org/10. 1093/ajae/aav019, http://ajae.oxfordjournals.org/content/97/4/1206. full.pdf+html.
- General Statistic Office (2008). Exports in march and the first quarter of 2008 (xuat khau hang hoa thang 3 va quy 1 nam 2008). Available from http://www.gso.gov.vn [Accessed: 25 August, 2012:].
- Ghosh, M., & Whalley, J. (2004). Are price controls necessarily bad? The case of rice in Vietnam. *Journal of Development Economics*, 73(1), 215–232.
- Giesecke, J. A., Tran, N. H., Corong, E. L., Jaffee, S. (2013). Rice land designation policy in Vietnam and the implications of policy

reform for food security and economic welfare. *The Journal of Development Studies*, 49(9), 1202–1218.

- Government of Vietnam (2008). Report and response to questions by Prime Minister Nguyen Tan Dung. Hanoi: 12th National Assembly, 4th meeting, 13 November 2008, Report No. 177/BC-CP.
- Grafton, R. Q., Daugbjerg, C., Qureshi, M. E. (2015). Towards food security by 2050. Food Security, 7(2), 179–183.
- Grant, W. (1995). Is agricultural policy still exceptional? *The Political Quarterly*, 66(3), 156–169.
- GSO. (1997). *Statistical yearbook of Vietnam 1996*. Statistical Publishing House: Hanoi.
- GSO (2004). So lieu thong ke Vietnam the ky XX (in English: the statistics of Vietnam for the XXth century). Hanoi: Statistical Publishing House, Hanoi.
- GSO (2014). Vietnam living standards survey 1992 1993. World Bank Microdata Library. Available at http://microdata.worldbank. org/index.php/catalog/1910/study-description.
- GSO. (2016). Results of the Vietnam household living standard survey 2014. Hanoi: General Statistical Office.
- GSO (2017). Vietnam household living standards survey 2004. World Bank Microdata Library. Available at http://microdata.worldbank. org/index.php/catalog/2370.
- Ha, P. V., Nguyen, H. T. M., Kompas, T., Che, T. N., Trinh, B. (2015). Rice production, trade and the poor: regional effects of rice export policy on households in Vietnam. *Journal of Agricultural Economics*, 66(2), 280–307.
- Headey, D., & Fan, S. (2008). Anatomy of a crisis: the causes and consequences of surging food prices. *Agricultural Economics*, 39, 375–391.
- IFPRI. (1996). Rice market monitoring and policy options study. Washington: IFPRI.
- ITC (2019). Trade map: Trade statistics for international business development. Available from http://www.trademap.org/Country_ SelProductCountry_TS.aspx?nvpm=1|704|||1006|||4|1|1|2|2|1|2|1| [Accessed: 23 March, 2019].
- Le, H. D., Tran, L., Le, B. M., Ha, H. T., Nguyen, Q. A., Tran, T. D., Doets, E., Hulshof, P., Elburg, L., Melse-Boonstra, A., Brouwer, I. (2013). Food composition table for Vietnam Available from http://www.fao.org/infoods/infoods/tables-and-databases/asia/en/ [accessed: 8 April 2019.
- Maclean, J., Hardy, B., Hettel, G. (2013). *Rice almanac: Source book* for one of the most important economic activities on earth, 4th edn. Los Banos: IRRI.
- Markussen, T., Tarp, F., Van den Broeck, K. (2011). The forgotten property rights: Evidence on land use rights in Vietnam. World Development, 39(5), 839–850.
- Martin, W., & Anderson, K. (2011). Export restrictions and price insulation during commodity price booms. *American Journal of Agricultural Economics*, 94(2), 422–427.
- Minot, N., & Goletti, F. (1998). Export liberalization and household welfare: the case of rice in vietnam. *American Journal of Agricultural Economics*, 80(4), 738–749.
- Minot, N., & Goletti, F. (2000). Rice market liberalization and poverty in Viet Nam. International Food Policy Research Institute.
- Molini, V. (2006). Food security in Vietnam during the 1990s. WIDER research paper 2006/67.
- Nguyen, H. T. M., Kompas, T., Breusch, T., Ward, M. B. (2017). Language, mixed communes, and infrastructure: Sources of inequality and ethnic minorities in vietnam. *World Development*, 96, 145–162.
- Nielsen, C. P. (2003). Vietnam's rice policy: Recent reforms and future opportunities. Asian economic journal, 17(1), 1–26.

- Pham, H.N., & Nguyen, N.Q. (2009). Vietnam's rice sector 2008 and forecast for 2009 [nganh gao vietnam 2008 va trien vong nam 2009]. Vietnam Agriculture Outlook 2009 Conference [Hoi thao trien vong thi truong nganh nong nghiep Viet Nam 2009]. Hanoi 24-25/03/2009.
- Ray, R. (2007). Dietary changes, calorie intake and undernourishment: a comparative study of india and vietnam. Discussion Paper 2007-01. School of Economics and Finance.
- RFA (2009). VFA under the ax of public opinion [Hiep hoi luong thuc duoi bua riu du luan]. Available at http://www.rfa.org/ vietnamese/news/programs/ReviewOnlineDomesticPress/Vietnamfood-association-under-critics-why-nnguyen-05232009083937.html, accessed 22/10/2009.
- Sheingate, A.D. (2003). The rise of the agricultural welfare state: institutions and interest group power in the United States, France, and Japan. Princeton University Press.
- Skogstad, G. (1998). Ideas, paradigms and institutions: agricultural exceptionalism in the european union and the united states. *Governance*, 11(4), 463–490.
- Slayton, T. (2009). Rice crisis forensics: How Asian governments carelessly set the world rice market on fire. Center for Global Development Working Paper No. 163.
- Tadasse, G., Algieri, B., Kalkuhl, M., von Braun, J. (2016). Drivers and triggers of international food price spikes and volatility. In Kalkuhl, M., von Braun, J., Torero, M. (Eds.) *Food price volatility and its implications for food security and policy*, AG (pp. 59–82). Switzerland: Springer International Publishing.
- Thi, H. T., Simioni, M., Thomas-Agnan, C. (2018). Assessing the nonlinearity of the calorie-income relationship: An estimation strategy–with new insights on nutritional transition in vietnam. *World Development*, 110, 192–204.
- Timmer, C. P. (2012). Rice price formation in the short run and the long run: the role of market structure in explaining volatility. In Munier, R. B. (Ed.) *Global uncertainity and the volatility of* agricultural commodities prices (p. 151). Amsterdam: IOS Press.
- Tran, C.T., Do, L.H., Le, N.M. (2013). Who has benefited from high rice prices in Vietnam. Oxfam: Hanoi.
- Tsukada, K. (2011). Vietnam: Food security in a rice-exporting country. In Shigetomi, S., Kubo, K., Tsukada, K. (Eds.) *The world food crisis and the strategies of asian rice exporters* (pp. 53–72).
- VASS (2011). Poverty reduction in Vietnam: Achievements and challenges. The Gioi Publisher.
- World Bank (1998). Vietnam rising to the challenge: An economic report. Washington DC: World Bank. Report No 18632-VN.
- World Bank. (2003). Poverty. Hanoi: World Bank.
- World Bank. (2008). Capital matters. Joint donor report to the vietnam consultative group meeting. Hanoi: World Bank.
- World Bank. (2011). Market Economy for a middle-income Vietnam. Joint donor report to the vietnam consultative group meeting. Hanoi: World Bank.
- World Bank. (2012). Well begun, not yet done: Vietnam's remarkable progress on poverty reduction and the emerging challenges. World Bank Report No. 70798-VN. Hanoi: World Bank.
- World Bank (2016). Taking stock: an update on Vietnam's recent economic developments. Special focus: Transforming Vietnamese agriculture - Gaining More from Less.
- World Bank (2017). World development indicator.
- World Bank. (2018). Climbing the ladder: Poverty reduction and shared prosperity in vietnam. World Bank Report No. 70798-VN. Hanoi: World Bank.
- WTO. (2016). World trade statistical review. Hanoi: World Bank.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Hoa-Thi-Minh Nguyen is a Senior Lecturer at the Crawford School of Public Policy, the Australian National University. Her work focuses on economic policies in health and food security, and issues related to climate change, inequality and poverty. Before joining the Crawford School, she was a research economist at the Centre for Analysis and Forecasting, Vietnam Academy of Social Sciences.



Adrian Kay is an Honorary Professor in the Crawford School of Public Policy at the Australian National University. His research interests are in comparative and international public policy.



Huong Do is an Economics Phd Scholar at the Crawford School of Public Policy, the Australian National University. She is interested in analyzing policies in foodand bio-security. Before doing her PhD program, Huong was a senior expert at Vietnam's Institute of Policy and Strategy for Agriculture and Rural Development.



Professor Tom Kompas is the Foundation Director of the Australian Centre for Biosecurity and Environmental Economics (ACBEE) and one of four Chief Investigators in the Centre of Excellence for Biosecurity Risk Analysis (CEBRA) at the University of Melbourne. He has dedicated much of his recent time and work to public policy in Australia and the region.

Affiliations

Hoa-Thi-Minh Nguyen¹ . Huong Do¹ · Adrian Kay¹ · Tom Kompas^{1,2}

Huong Do lien.huong.do@anu.edu.au

Adrian Kay adrian.kay@anu.edu.au

Tom Kompas tom.kompas@anu.edu.au

- ¹ The Crawford School of Public Policy, Crawford Building (132), Lennox Crossing, The Australian National University, Canberra, ACT 2601, Australia
- ² Centre of Excellence for Biosecurity Risk Analysis, School of Biosciences and School of Ecosystem and Forest Sciences, University of Melbourne, Melbourne, VIC, 3010, Australia