

Food systems and farmers' bargaining power: The case of "Unfair Trade Practices" in the EU

Miguel Angel de Porras Acuna^a, Sylvain Quiédeville^b

^aFiBL Europe/University Pablo de Olavide, Miguel.deporras@fibl.org

^bFiBL Europe, sylvain.quiedeville@fibl.org

Abstract: *EU agricultural policies have often been formulated from an "orthodox approach", without directly tackling the issue of markets structure that tend to lower the power and economic welfare of farmers. This situation reveals a need to better comprehend the long-standing dynamics and processes determining the structural position of farmers to find suitable strategies for pushing forward more sustainable food value chain models. Classical and neo-classical economic approaches to the problem often consider Unfair Trade Practices (UTP) as only cyclical phenomenon caused by temporary disequilibrium on the market. Market forces are intended to stabilise prices and to balance power among value chain actors. Such approaches underestimate the role played for example by capital accumulation in EU food systems. Alternative and more complex analytical frameworks, for instance the Marxist or Chayanovian perspectives, need to be developed to better understand factors determining the lack of power and the weak position of farmers in food value chains, including the way the Common Agricultural Policy (CAP) has been influencing and could be impacting these aspects in the future. New approaches for dealing with UTP should also be developed to find innovative solutions being able to develop a more sustainable food system. This paper raises the crucial need of increasing awareness and informing policy-makers on potential new policy instruments and tools that could be used to address this problem of power imbalance and of inadequate governance schemes weakening the position of farmers in food value chains and causing or aggravating agricultural crises. The paper aims to outline suggestions to bring this research topic into strategic plans for future EU farming systems.*

Keywords: *Unfair Trade Practices, EU Policy, Economic Welfare, Value Chain Structure, Fairness*

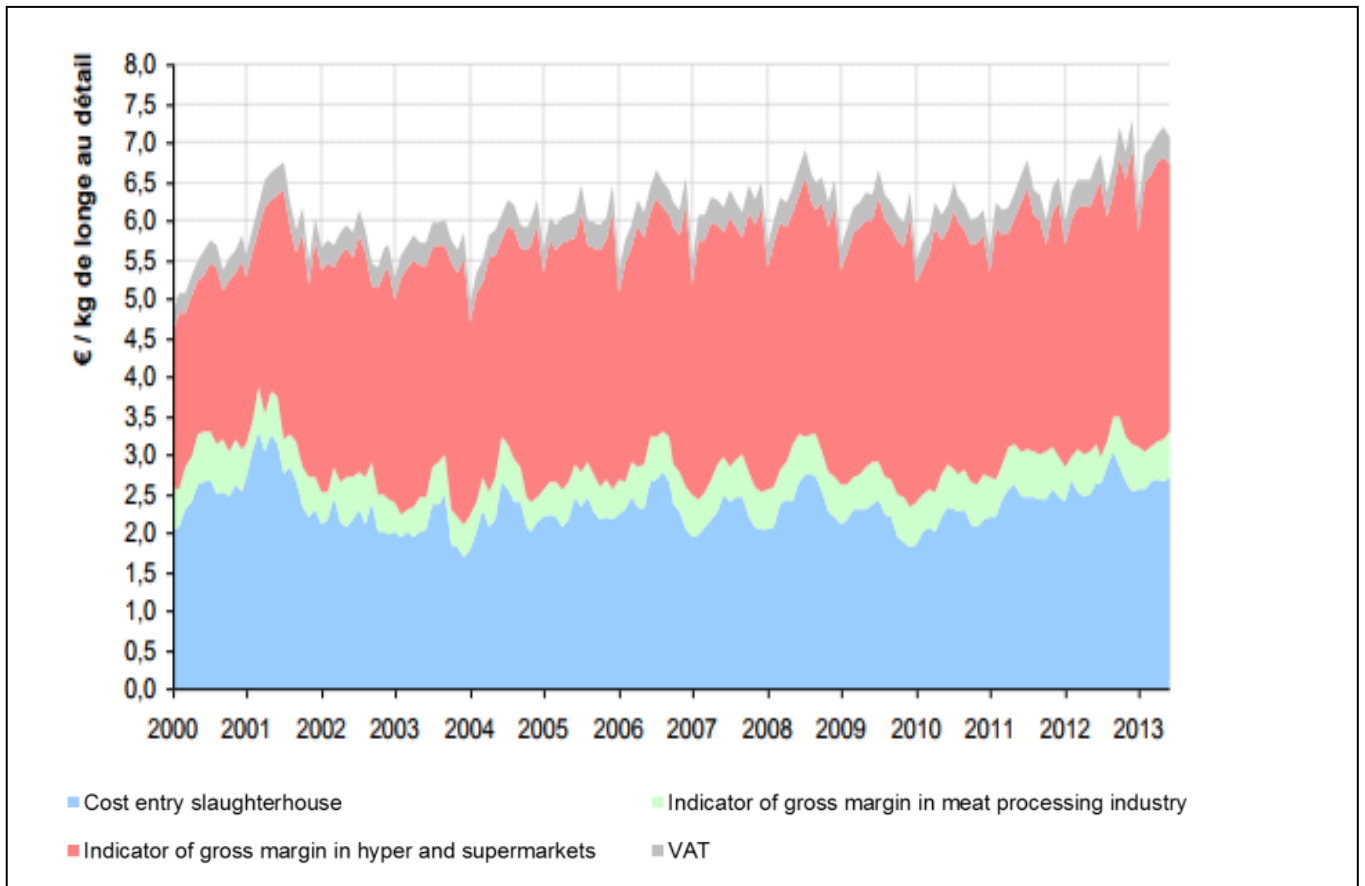
Introduction

Following the creation of the European Economic Community, antecedent of the current European Union (EU), a Common Agricultural policy (CAP) was developed at European level mainly to increase productivity, farmers' incomes, as well as ensuring food security, bringing acceptable prices for consumers and maintain population in rural areas. In its first phase, the CAP was designed to strongly support EU farmers through a set of market interventions. One of the most important mechanisms used in the framework of this policy was the definition of intervention prices, when market prices went below a certain threshold, resulting in more stable and higher selling prices for EU farmers. At the same time, although the initial CAP organised the functioning of agricultural commodity markets, it did not directly address the structural position of actors in food value chains. Issues of equity and value shared in the agrifood chain are on the rise, suggesting that CAP instruments are insufficient to adequately tackle the economic vulnerability and survivability of farmers. In other

words, the application of intervention prices could not ensure that prices offered to farmers were situated within an “acceptable” range of values.

Furthermore, the instruments of the initial CAP and its subsequent developments could not prevent an increased concentration of wholesalers, supermarkets and retailers (Bukeviciute, 2009). This fact strongly influenced the development of the EU markets, with an important inequality in the distribution of wealth among food value chains actors. We observe a decreasing share of added value captured by farmers. On the other side of the spectrum, downstream actors have gained size and power. The example of pork loin in France shows that in the period from 2000 to 2013, the proportion of added value captured by wholesalers, supermarkets and retailers has been on the rise. The value captured by the upper part of the chain increased from around 5€/kg of pork loin during that period while it remained stable for the slaughtering industry and farmers. This example, though, should not be automatically generalised to the whole agricultural sector.

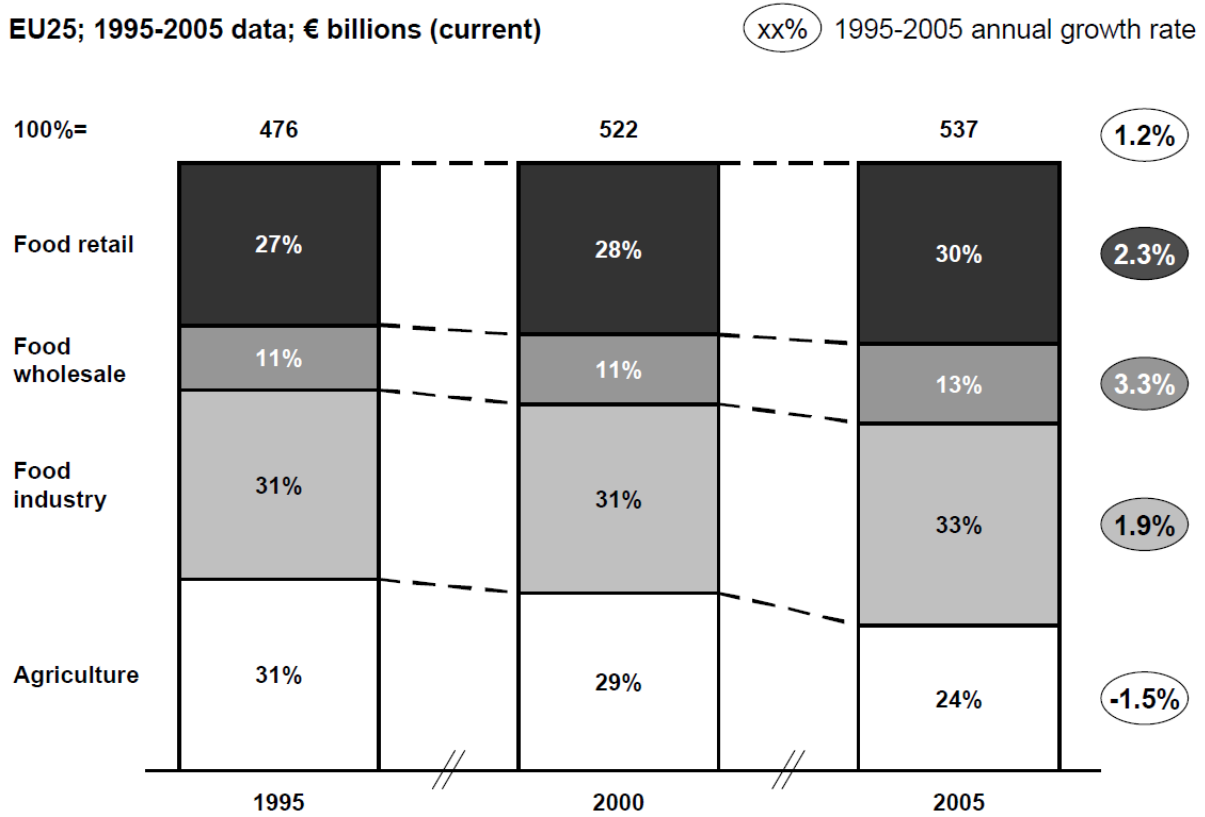
Graph 1. Composition of the monthly price of the pork loin in France from 2000 to 2013



Source: French Observatory on prices and margins formation of food products (2016). Based on FranceAgriMer, RNM, and Kantar Worldpanel.

Furthermore, data from the EU commission suggest that the situation shown in the previous example might be widespread to the whole EU agricultural sector over the years 1995-2005 (lack of available data from 2005 to now).

Graph 2. Evolution of value-added within the EU25 food value chain between 1995 and 2005



Source: European Commission (2009)

We see in graphic 2 a progressive increment of the value share perceived by the downstream value chain actors, with an increase of 3 points from 1995 to 2005. On the other hand, the proportion of the value captured by farmers decreased by 7 points from 1995 to 2005. This trend is a structural movement where farmers are less and less “powerful”. The rather weak position of farmers in food chains implies a low power of negotiation and the quasi-impossibility to impose prices to food traders. Farmers have therefore limited options to increase their incomes; they can only reduce their production costs or increase the productivity.

The continuous decrease in the influence of farmers in food value chains did not stop after the successive reforms of the CAP. The way of supporting farmers changed of nature with the introduction of direct subsidies. Alongside this change, the general economic liberalisation and opening of markets to goods and capital since the 80s and 90s, respectively, has reinforced the concentration of the downstream actors of food value chains, leading to an increase of their bargaining power and reducing in

parallel farmers' influence and incomes (Bekeviciute, 2009; Dobson, 2003). This situation questions more generally the resilience of food value chains.

After the so-called “food crisis” in 2007, the EU institutions acknowledged several agricultural markets issues (European Commission, 2009). They developed the concept of Unfair Trade Practices (UTP) meaning there is an unfair distribution of the value produced in food value chains. Still, this concept was developed with a view to tackling the “fairness” of food value chains.

Some authors address the notion of “fairness” in the literature. Rabin (1993) defined an action as fair if its intent is “kind” and as unfair in the opposite case (unfriendly transaction). According to this author, the level of kindness is directly linked to how equitable the distribution of value stirred by the transaction is. Psychologists see “fairness” as an important issue in social exchange (Cialdini, 1993) while the equity theory argues that a more equitable distribution of value is conducive with a greater level of actors' satisfaction (Adams, 1965). Having said that, certain market situations suggest that the notion of “fairness” may not be that important to consider. This might be the case in a situation of perfect market equilibrium; even though there could be a very uneven distribution of value among actors, an economic equilibrium is being reached, corresponding to a situation where all actors get as much value as possible from transactions (Smith and Williams, 1990). Since this is a situation of perfect market equilibrium; in theory, no actors are to be accused to exert an excessive power over others.

We argue in this discussion paper that the approach developed by the European Commission is not sufficient to adequately tackle this problem. The question of which actors are responsible, directly or indirectly for these practices, is not sufficiently addressed. The European Commission proposed four types of actions: (1) to tackle UTP, (2) increase transparency, (3) foster integration of EU markets and (4) increase competition through voluntary producers' integration. These lines of action can be considered as important to increase “fairness” in food value chains. However, they have not produced significant effects in that regard thus far.

This discussion paper pursues two objectives: (1) to critically review the underlying analytical approach driving the designing of EU agricultural policies and (2) to discuss the potential of alternative analytical approaches in their ability to contribute to agricultural policies taking more the notion of “fairness” into account.

Frameworks to address “fairness” in food value chains

Pareto optimality and theorems of welfare

Since the CAP reform in 1992, EU agricultural policies are implicitly framed from a neo-classical economic perspective. That is because this reform and the subsequent ones have been driven by the imperative of reducing the so-called “market distortions”, that is, to minimise any interventions that may alter the “natural” market equilibrium and thus reduce the global economic welfare (Mahé and Roe, 1996). Typically, the first CAP set intervention prices modifying market equilibriums, inciting growers to produce more than in “normal” situation, and decreasing the consumers' welfare (distortion of the demand curve, with higher prices). The first CAP was called into question by the EU given the induced distortion effects as well as the pressure exerted by both the Americans and the World Trade Organisation calling for market

liberalisation. CAP direct payments are considered to be much less distortive than market instruments (Dewre et al. 2001).

The neo-classical paradigm relies on the notion of Pareto optimality, the general economic welfare and the maximisation of individuals' utility. The concept of Pareto optimality, which has been extensively applied in several disciplines so far, corresponds to a state of resource allocation where it is not possible to ameliorate the situation of one individual according to his/her preferences without lowering the situation of any other individuals (Stiglitz, 1981).

The emphasis on this framework leads to a lack of focus on social dimensions like contractual relationships, value shared among food value chain actors, power balance, equity and social-being. The Pareto optimum is a minimal understanding of efficiency and does not consider how the added value is distributed between actors along the spectrum from high benefits to losses. This approach overlooks the share of actors with low incomes compared to others. Still, the Pareto optimum approach does not account for the positive and negative externalities in the same way as for the concept of perfect market. With respect to the concept of perfect market, it was critiqued *inter alia*, the presence of not fully rational economic agents, an imperfect circulation of information and the occurrence of transaction costs. Welfare theorems build on this notion of perfect market stating that under competitive equilibrium markets Pareto optimum situations are being created (Boadway and Bruce, 1984). It must be emphasised that calling into question the notion of perfect market also questions the validity of the welfare theorems and the possibility to attain Pareto optimum situations.

In addition, the well-known impossibility theorem of Arrow has shown, taking the example of elections, the impossibility of aggregating all individual preferences while meeting all of the following criteria: Pareto optimum, independence of irrelevant alternatives, universality and non-dictatorship (Kelly, 2014). This suggests that attaining a Pareto optimality could occur at the expense of important social aspects like non-dictatorship.

Despite of these critics and the recognition of concerns on the welfare theorems and the Pareto optimum approach, the EU agricultural policy is still determined under the umbrella of the neo-classical economic paradigm. Even though some drawbacks are being addressed by the EU, they often act separately from the general agricultural policy and take the form of rather isolated measures. The latter are not to be understood as a “lump–sum transfer of wealth” and should thus not be considered as mirroring the second theorem of welfare. Even if it was so, the redistribution of wealth to disadvantaged groups of persons while remaining in the frame of the second welfare theorem would require that national authorities are perfectly informed on individual preferences and all possibilities of production of firms. The possible existence of these two necessary elements has been heavily called into question in the last decades.

In a nutshell, the current framework being used by the EU, based on a neo-classical paradigm, is missing essential social aspects on the “fairness” of transactions. There is only little emphasis on the structural position of actors in food value chains and related implications. As already said, the setting-up of specific EU measures does not sufficiently address the lack of focus on social aspects for two reasons. The first is that they do not directly refer to the notion of “fairness”. The second is due to the redistribution of wealth that creates inefficiencies.

It is necessary to consider alternative analytical approaches to address the topic of “fairness” in food value chains. For this reason, this discussion paper makes a brief

review on alternative frameworks that may be used to enrich the current approach taken by EU analysts and decision-makers when designing agricultural policies.

The peasant economy and Marxist approaches

The peasant economy

The “Peasant Economy” study developed by Alexander Chayanov (1996) is one of the most influential ones in the current debates in the field of agroecology and peasantry. Chayanov considers farms as independent economic units. Although modern European farmers are quite different from the conception of peasants by Chayanov, the framework of the Peasant Economy may be used to better understand social factors driving farmers’ behaviour in relation to their structural characteristics as production unit. For instance, this framework is useful to look at the decisions associated with the presence of “lock-in” like investments in material. These investments require the materials to be sufficiently used; and non-necessary operations like tillage might be effectuated, increasing production costs of farmers and reducing their incomes in parallel.

Chayanov considers a Peasant farm as a non-capitalist production unit, arguing that a traditional farm cannot be considered as a capitalist business since peasants generally use family workforce. Russian peasants in the XIX century are respectively very different actors and context compared to “modern” farmers. However, the dependency of current farming systems on family labour is still existing in many farms in the EU. This needs to be considered since it might distort some hypothesis on farmers’ behaviour being used by neoclassical economists. The fact that the farm’s workforce consists of family members might indeed break the “rule” of free mobility of resources which is an essential component of a so-called perfect market. Moreover, the interesting work by Chayanov about the integration of Peasant in the national market can help to identify some of the critical factors driving the position of farmers along agri-food value chains. Chayanov gives special attention to the ways capitalism is being entered into the peasant mode of production. Indeed, he criticises collective actions in the agri-food chain, pointing out cases of “weak” farms with “local capital” in front of large trade firms often integrated in the international capital market. The fact of the matter is that capital accumulation does not operate at the same pace at farm level as compared to the downstream value chain segments, leading to an increasing power disequilibrium among actors.

The Peasant Economy Framework developed by Chayanov has been quite influential in the fields of rural sociology and agroecology. The sociologist Jan Douwe Van der Ploeg (2008) built the concept of “Food Empire” upon this. He showed, in the context of global capital firms, that the so-called “Food Empire” is driving the process of capitalist accumulation within food value chains and “squeezing” farmers. This conflictual approach to the problem of “fairness” in agri-food value chains appears to be a relevant analytical framework as policy-makers need to better understand the logics governing the structural position and dynamics of value chains’ actors.

Marxist approaches

Marxist approaches are also relevant to the study of “fairness” in agri-food value chains. Since the pioneering work of Karl Marx, many relevant authors have been working in the field of the “agrarian question”. Most of the influential authors in this school of thought addressed this topic, making the agrarian question one of the main pillars of the Historical Materialism. Marx already dealt with the topic of the peasants by integrating it as a functional part of the capitalist production mode. He argued that, in the same way as it happened with craftsmen’s organisations, peasants will disappear because of the development of capitalism in rural areas. Traditional and inefficient farms will be replaced by bigger and more capitalistic ones.

In line with this, we should give a special attention to the work of Karl Kautsky (1966) who supports the idea of the doom of peasant farms under a capitalistic agriculture. This influenced many Marxists and politicians who thus supported the need to modernise peasantry systems in order to develop productive forces. Marxists like Bernstein affirm that peasantry does not exist as peasants’ incomes mostly depends on the external provision of workforce (Bernstein, 2014).

The Marxist framework influenced several authors in developing theories on the role of peasants and farmers and their inclusion in markets and in the movement of global capital accumulation. These approaches offer very important insights to the analysis of agri-food value chains as well as a better understanding of the determinants and wherefores of “fairness” in value chains.

Towards an integrated approach to comprehend and tackle the “fairness” in food value chains

Resilience and systemic sustainability

Mainstream conceptual economic frameworks have been extensively criticised in the literature. Critics are, *inter alia*, the non-consideration of either positive or negative externalities as well as the absence of perfect equilibrium markets and of a perfect mobility and allocation of resources. For the purpose of this paper, the main concern derived from the literature is that traditional conceptual frameworks poorly address social aspects and particularly the question of “fairness”. The notion of “fairness” in food value chains partly informs the sustainability and resilience of food value chains. Resilience can be defined as “the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity of self-organisation, and the capacity to adapt to stress and change” (IPCC, 2007: 880). Most existing studies on resilience, though, measure resiliency without questioning the suitability of the underlying conceptual framework used. Equity in value chains is considered but there is a lack of understanding on the factors driving the “fairness” in food value chains.

In the context of agriculture, only a few studies mentioned the concept of resilience or “systemic sustainability”, taking account of the way value chain actors’ are organised. Attributes of survival capacity (flexibility, adaptivity, robustness and responsiveness), i.e. the way a value chain can react and adapt to risks, uncertainties and disturbances, can be used to inform resiliency (Talamini and Velloso Ferreira, 2010; Thadakamaila et al., 2004). These attributes can be measured using indicators of Social Network Analysis (SNA). This is for instance what Bassenne et al. (2015) proposed in their pioneering work developing the notion of “systemic sustainability”. By the concept of systemic sustainability the authors refer to the three classical pillars of sustainability (economic, social and environmental) complemented by the network dimension. They also refer to value chain governance models, combining the centrality (power) and density of an actor network, and highlighting the way food value chains are organised. That said, two types of drawbacks can be identified. The first is that such studies primarily highlight issues of bargaining power balance in relation to the capacity of absorbing shocks or adapt to diverse vagaries, and not strictly speaking, as an economic factor of performance. The second is that the global system underpinning the sustainability and resilience of food value chains is poorly questioned. There is a need to develop new approaches and/or new conceptual frameworks in order to better address the issue of “fairness” in food value chains.

Some thoughts to an integrated approach

There are two elements of importance to bear in mind with respect to the development of an integrated approach or conceptual framework. The first is that it should have the ambition to look at the dynamics of the whole economic system and of the actors in it. A second element is that it should look at the capital accumulation at every level of food value chains. Particularly, the approach should be able not only

to measure the “fairness” within food value chains but also to identify the determinants of it and suggest potential solutions in terms of policies and/or collective organisation of actors. The goal to pursue should not be to maximise individuals’ utility or to have “perfect markets” but to reach an “acceptable” level of system’s resilience and actors’ satisfaction while obtaining an “acceptable fairness” in food value chains transactions. In that sense, an approach in terms of resilience could be combined with a preference approach together with the Peasant and Marxist frameworks.

Measures can be taken to overcome drawbacks of the current economic system in terms of its capitalistic nature. Interesting developments recently happened. For instance, the European Institutions recently founded, in October 2017, an agreement on the Omnibus Regulation. The Omnibus is a set of propositions to amend the financial regulation governing the EU budget and 15 other sectorial legal acts (Council of the EU, 2017). This proposal includes norms that should impact the functioning of the entire food sector. Among others, this agreement includes amendments to the Common Market Organisation Regulation with sectorial clauses in terms of equity (value share). These measures target all food value chain actors (not only farmers). That said, their voluntary nature is still leaving quite some “room of manoeuvre” to sizeable and powerful food actors.

In the same vein, social innovations, including alternative forms of markets, can be developed. Social innovations refer to the fields of strategic management, innovation, and organisational development (Orsburg and Schmidpeter, 2013), and can be defined as “new ideas (products, services, and models) to meet social needs and create new social relationships and collaborations” (European Commission, 2013). Common to local social innovations are a geographically or socially bound network in which collaborative forces are easier to develop and sustain than in the global marketplace. Jaeger-Erben et al. (2015) identified more than 20 social innovations cases of food production and consumption within a set of 62 social innovations. Two examples of social innovations are the development of short food value chains allowing farmers to bypass powerful downstream actors, and the implementation of local geographic indications. The development of short value chains might also occur in parallel of a full integration of transformation activities at farm level, therefore eliminating all intermediaries.

Even if such strategies might be successful, they cannot be expected to substantially change the economic system at large. They remain ways of coping with limitations of the current system rather than changing it to generate more effectiveness from the standpoint of resilience and “fairness” in value chain transactions. The measures generally taken so far by the EU have been very much producer oriented, but omitting the inclusion of retailers into the agreements. Examples can be found like with the so-called “milk package” of which the actions undertaken were mostly oriented towards producers’ organisations. Further reflections might be useful on the possibility to draw on past market instrument like intervention prices despite their known disadvantages. The development of less distorting measures to reduce risks linked to price variability can also be interesting; this could be for instance a system of “public insurance” with both implicit minimum and maximum prices (levying taxes when prices are high and redistribution when prices are low). The further use of

contracts to fix in advance prices offered to farmers is another example of a potentially relevant reflection that should be carried out.

Taking a broader perspective it is stressed in the literature that the accumulation of capital could be limited by taxing the “stock of capital” owned by individuals and/or companies. This proposition was defended by several economists including Maurice Allais (1989), a French Economic Nobel Prize winner (laureate). The latter even proposed to replace all taxes on revenues, judged economically inefficient because based on the resource flow and hampering individual initiatives, by a simple flat tax on the stock of capital. Should the accumulation of capital by firms be limited, preventing a high concentration, considerable power of food value chain downstream actors would be a likely outcome. According to the Marxist approach, this could help in getting the pressure off farmers and increase the “fairness” in trade practices. Furthermore, the literature highlights a causal relationship between capital accumulation and the globalisation movement (Arrighi, 2000). The liberalisation of international markets on goods and capitals, in absence of suitable regulation, has favoured a concentration of the capital in the hands of a few number of firms, leading in turn to bargaining power issues within EU food value chains. A better regulation on this rapid development might prevent a too high concentration and accumulation of capital by certain food companies. This could include for instance measures to limit the size of supermarkets and food companies. A better regulation on the buyout business in EU food chains could also be part of a solution package to the issue of “fairness”. These elements are quite far beyond the traditional scope of agricultural policies and would require to broaden the spectrum of thinking to food value chains or even more widened. This perspective, though, might be a more realistic level of intervention.

Conclusion

This discussion paper aimed at identifying problems in relation to the use of classical analytical frameworks, in setting-up EU agricultural policies, regarding the “fairness” in food value chains. It emphasises the crucial need of increasing awareness and informing policy-makers on potential new policy instruments and tools that could be used to address the issue of power imbalance and of inadequate governance schemes weakening the position of farmers in food value chains and causing or aggravating agricultural crises.

The integration of new analytical approaches in assessing agri-food policies in the field of chain governance is necessary. Thus far, policy developments failed at solving structural problems in food value chains. In fact, the measures adopted in the past have not addressed the underlying issue of capital accumulation leading to an increasing size and concentration of downstream food value chain actors. The previous actions undertaken were oriented on voluntary schemes without considering much the positions and bargaining power of the different actors along the value chain.

We argue that, beside the possible use of a revised analytical framework, a range of measures to restrain the concentration of retailers might be more effective to attaining a better “fairness” in actors’ transactions and to conserve a certain vitality in rural areas. In our view, relevant issues in relation to the structural position of actors in food value chains can be better identified and analysed through the lens of alternative analytical frameworks. This discussion paper has shown that there is no

perfect conceptual frameworks, either traditional or alternative ones. Nevertheless, we support the need to consider a variety of analytical frameworks to adequately address complex food policy issues.

References

- Adams, J.S., 1965. Inequity In Social Exchange. *Advances in Experimental Social Psychology*, 2, 267–299.
- Allais, Maurice (1989). L'impôt sur le capital et la réforme monétaire.
- Arrighi, G (2000). Globalization, state sovereignty, and the 'endless' accumulation of capital. *The ends of globalization: Bringing society back in*, 125-150.
- Bassene, Jean-Baptiste; Quiédeville, Sylvain; Chabrol, Didier; et al. Organisation en réseau et durabilité systémique de deux filières alimentaires (riz biologique et petit épeautre en France). Actes des 8èmes Journées de recherches en sciences sociales, Grenoble, France, 11-12 décembre 2014. INRA, SFER, CIRAD.
- Bernstein, H (1977). Notes on Capital and Peasantry. *Review of African Political Economy*. Taylor and Francis, Ltd.
- Bernstein, H (2014). Food sovereignty via the “peasant way”: a sceptical view. *Journal of Peasant Studies*, Volume 41, 1031-1063.
- Boadway, R.W; and Bruce, N (1984). *Welfare economics*. New York: B. Blackwell.
- Bukeviciute, L; Dierx, A; Ilzkovitz, F; and Roty, G (2009). Price transmission along the food supply chain in the European Union. Paper prepared for presentation at the 113th EAAE Seminar “A resilient European food industry and food chain in a challenging world”, Chania, Crete, Greece, date as in: September 3 - 6, 2009.
- Bukeviciute, L; Dierx, A; and Ilzkovitz, F (2009). The functioning of the food supply chain and its effect on food prices in the European Union. *European Economy Occasional Papers* 47.
- Chayanov, A. V (1966). *The theory of Peasant Economy*. The American Economic Association, Homewood.
- Cialdini, R.B., 1993. *Influence : science and practice*. New York: HarperCollins.
- Council of the EU. 2017. Omnibus regulation: Council adopts new, simplified, agricultural rules. <http://www.consilium.europa.eu/en/press/press-releases/2017/12/12/omnibus-regulation-council-adopts-new-simplified-agricultural-rules/pdf>.
- Dewbre, J., Antón, J., and Thompson, W., 2001. The Transfer Efficiency and Trade Effects of Direct Payments. *American Journal of Agricultural Economics*.

- Dobson, P.W; Waterson, M; and Davies, S.W (2003). The Patterns and Implications of Increasing Concentration in European Food Retailing. *Journal of Agricultural Economics*, 54(1), 111-125.
- European Commission (2009). Communication on A better functioning food supply chain in Europe. European Commission. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009DC0591&from=en>.
- European Commission (2009). The evolution of value-added repartition along the European food supply chain. European Commission. http://ec.europa.eu/economy_finance/publications/pages/publication16075_en.pdf.
- European Commission (2013). Green Paper on Unfair trading practices in the business-to-business food and non-food supply chain in Europe. European Commission. <http://eurlex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:52013DC0037&from=EN>.
- European Commission (2016). CAP expenditure and CAP reform path. European Commission. http://ec.europa.eu/agriculture/sites/agriculture/files/cap-post-2013/graphs/graph2_en.pdf.
- European Parliament (2010). Report on fair revenues for farmers: A better functioning food supply chain in Europe. European Parliament. <http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A7-2010-0225&language=EN>.
- European Parliament (2011). Report on the farm input supply chain: structure and implications. European Parliament. <http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A7-2011-0421&language=EN>.
- European Parliament (2013). Report on the food crisis, fraud in the food supply chain and the control thereof. European Parliament. <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A7-2013-0434+0+DOC+XML+V0//EN>.
- European Parliament (2015). Study on unfair trading practices in the business-to-business food supply chain. European Parliament. [http://www.europarl.europa.eu/RegData/etudes/STUD/2015/563438/IPOL_STU\(2015\)563438_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2015/563438/IPOL_STU(2015)563438_EN.pdf).

- European Parliament (2013). Study on Semi-Subsistence Farming – Value and Directions of Development. European Parliament.
file:///C:/Users/miguel.deporras/Desktop/policy/supply%20chain/IPOL-AGRI_ET(2013)495861_EN.pdf .
- European Parliament (2016). Report on CAP tools to reduce price volatility in agricultural markets. European Parliament.
<http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P8-TA-2016-0504&language=EN&ring=A8-2016-0339>.
- European Parliament (2016). Report on Unfair trading practices in the food supply chain. European Parliament.
<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A8-2016-0173+0+DOC+XML+V0//EN>.
- European Parliament (2016). Annual report on EU competition policy. European Parliament
<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P8-TA-2016-0004+0+DOC+XML+V0//EN>.
- Eurostat (2011). <http://ec.europa.eu/eurostat/documents/3930297/5966590/KS-3211-743-EN.PDF>.
- French Observatory on prices and margins formation of food products (2016). Beef industry. Presentation to the Meat Market Observatory, EC, 2016, oct. 27th Philippe Chalmin, Philippe Boyer. https://observatoire-prixmarges.franceagrimer.fr/Lists/Liste%20des%20etudes%20autres/Attachments/171/2016_10_27_MeatObs_BOVIN.pdf
- IPCC (2007). “In Baede, A.P.M., van Der Lingen, P., Verbruggen, A. (Eds.), Climate Change 2007: Appendix to Synthesis Report.” Geneva.
- Jaeger-Erben; Ruchert-John, M.J; and Schafer, M (2015). Sustainable consumption through social innovation: a typology of innovation for sustainable consumption practices. *Journal of Cleaner Production*, 108 (1), 784-798.
- Kautsky, K (1988). *The Agrarian Question*. Zwan Publications, London.
- Kelly, J.S (2014). *Arrow impossibility theorems*. Academic Press.
- Mahe, L.P. and Roe, T.L., 1996. The Political Economy of Reforming the 1992 CAP Reform. *American Journal of Agricultural Economics*, 78 (5), 1314.

- Sanders, J; Gambelli, D; Lernoud, J; Orsini, S; Padel, S; Stolze, M; Willer, H; and Zanolì, R (2016). Distribution of the added value of the organic food chain. Braunschweig: Thünen Institute of Farm Economics. European Commission.
- Osburg, T; and Schmidpeter, R (2013). Social innovation. Solutions for a Sustainable Future.
- Rabin, M., 1993. Incorporating Fairness into Game Theory and Economics. *The American Economic Review*, 83 (5), 1281–1302.
- Smith, V.L. and Williams, A.W., 2000. *Bargaining and market behavior: essays in experimental economics*. Bargaining and market behavior. Cambridge University Press.
- Stiglitz, J.E (1981). Pareto Optimality and Competition. First published: May 1981. Full publication history. DOI: 10.1111/j.1540-6261.1981.tb00437.x.
- Talamini, E; and Velloso Ferreira, G.M (2010). Merging netchain and social network: Introducing the 'social netchain' concept as an analytical framework in the agribusiness sector. *African Journal of Business Management* 4:2981-2993.
- Thadakamaila, H.P; Raghavan, U.N; Kumara, R; and Albert, R (2004). Survivability of multiagent-based supply networks: a topological perspect. *Intelligent Systems, IEEE* 19:24-31.
- Van Der Ploeg, J.D (2008). *The New Peasantries: Struggles for Autonomy and Sustainability in an Era of Empire and Globalization*. EARTHSCAN, London 356 pp.