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Political debates and agricultural financing policies. Evaluating the creation of Brazil's Pronaf through Discourse Network Analysis

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Abstract:

The literature on rural development focuses on the socio-economic effects of agricultural financing, while the process of policy design is devoted less attention. Identifying policy coalitions may help understand the motivations behind a given financing system. Using Discourse Network Analysis, this paper studies the debates preceding the approval of the National Program for Strengthening Family Agriculture (Pronaf) in Brazil in the nineties. This represented a relevant overturn of the previous policy framework. Two coalitions were confronting each other: large farm business associations focused on productivity, and the movements of family farmers aimed at creating credit instruments for small producers. The strong pressure of social movements was paramount for promoting Pronaf. However, findings suggest that the Workers' Party, which found itself in a less conflicting position, played a key role in negotiating the introduction of particular measures.

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ABSTRACT

The literature on rural development focuses on the socio-economic effects of agricultural financing, while the process of policy design is devoted less attention. Identifying policy coalitions may help understand the motivations behind a given financing system. Using Discourse Network Analysis, this paper studies the debates preceding the approval of the National Program for Strengthening Family Agriculture (Pronaf) in Brazil in the nineties. This represented a relevant overturn of the previous policy framework. Two coalitions were confronting each other: large farm business associations focused on productivity, and the movements of family farmers aimed at creating credit instruments for small producers. The strong pressure of social movements was paramount for promoting Pronaf. However, findings suggest that the Workers' Party, which found itself in a less conflicting position, played a key role in negotiating the introduction of particular measures.

KEYWORDS

Agricultural financing; Policy-making; Discourse Network Analysis; Brazil; Pronaf.

INTRODUCTION

In the history of rural development, agricultural financing has always represented a key instrument for creating employment opportunities and expanding farm production. It also plays a paramount social function, by alleviating poverty and compensating the high risk associated with working in agriculture.

The political dynamics behind the design of agricultural financing policies are particularly relevant in the case of Brazil. Agriculture has always been a fundamental sector for the Brazilian economy: in 2013, this country represented 5 per cent of the world agricultural production (the fourth largest share after China, the USA and India), and 6 per cent of the agricultural exports (the third largest share after the USA and the Netherlands) (FAO, 2017). The National System of Rural Credit (SNCR), created in 1965, had represented the basis for modernizing Brazilian agriculture, allowing a transformation of its technical base, an increase in productivity, and the consolidation of agro-industrial complexes (Leite, 2001). Family agriculture – that in 1996 represented 85 per cent of the Brazilian farms – was almost neglected, with resources flowing to middle and large producers from the Centre-South, who focus mostly on export crops (Leite & Wesz Jr, 2014; Helfand, 2001). In 1995, the National Program for Strengthening Family Agriculture (Pronaf) was thus created, to provide credit to family farmers at favourable conditions (Grisa, 2012).

The reform of the SNCR and the approval of Pronaf was preceded by extensive debates among several actors (social movements representing family farmers, associations of agro-industrial businesses, policymakers, academics, international development institutions, etc.) in different contexts (social mobilization on the streets, mass media, universities, etc.). The conflicts between productivity increase and poverty reduction, farm businesses and peasants, export crops and products for internal consumption were at the core of these debates. Due to their importance for the Brazilian agriculture, the contents of the resulting norms have been extensively analyzed by literature (Flexor & Grisa, 2016; Garcias & Kassouf, 2016; Grisa et al., 2014; Leite, 2015; Resende & Martins Mafra, 2016). Instead, the political dynamics behind these significant changes in the farm financing system have been studied less. Identifying the actors involved, and their position on specific issues, is fundamental to understand the logic and the motivations behind Pronaf.

This article aims at assessing how the political discourse of key internal and external actors, including both the interrelationships among them and their agreement or disagreement on important issues, contributes to the design of agricultural financing policies. The approval of Pronaf is taken as a case study. The political-ideological linkages underlying the process of policy design, and their success or failure in influencing the final version of the programme are identified. For this purpose, Dis-

course Network Analysis is used as methodology to map such linkages, since this approach allows to analyze political and other discourses in the form of networks. Through a codification of the statements of various stakeholders, it is possible to create networks of actors who share the same views on a topic. Despite the numerous researches about Pronaf and the Brazilian agricultural financing system mentioned above, no study, to date, has analyzed the role of socio-political actors within the design process.

The rest of the paper is structured as follows. The next section contains a review of the literature to detect relevant divisive issues concerning agricultural financing policies. The third section outlines the main features of Pronaf, and identifies the stakeholders involved in its design process. The fourth section illustrates the methodology and the data collection process. Results are presented in the fifth section and discussed in the sixth one, before the conclusions.

LITERATURE REVIEW: AGRICULTURAL FINANCING POLICIES

The provision of credit has always been one of the most important agricultural policies in developing countries. Until the mid-Sixties, the main goal of the international organizations that inspired the policies of rural financing, primarily the World Bank (WB), was to interrupt the ‘vicious circle’ of low incomes, low saving and low productivity; hence, they were targeting mostly large commercial farmers (Ellis, 1992, p. 155). Later, the focus switched to small family farmers, due to their higher efficiency and production potential, the lack of financing opportunities for them apart from local moneylenders, and the expected positive impact on rural poverty. Still today, agricultural financing policies may be driven by a plurality of goals (e.g., increase productivity, fight rural poverty) and targets (e.g., specific crops, or social groups), and may rely on diverse institutions (e.g., State agricultural banks, commercial banks, multi-purpose agencies, etc.) and instruments (e.g., low interest rates, tax concessions, etc.). Based on a review of the literature on agricultural financing, 19 divisive topics concerning the potential objectives, targets, instruments and institutions of agricultural financing, that are likely to be discussed by consultants and policy-makers during the policy design process, were identified. These topics, summarized in Table 1, will be used to classify the statements of the actors involved in the elaboration of Pronaf, who can either agree or disagree, or avoid mentioning them.

The first group of topics concerns the goals of agricultural financing. The first potential goal is to increase agricultural incomes, primarily the salaries of people working in agriculture (either family farmers, or hired workers). The actors supporting this statement argue that rural credit should aim primarily at improving the living conditions of rural people. The second goal concerns agricultural productivity: actors supporting it consider that the increase of farm productivity should be the main target of any financing policy, regardless of the destination or distribution of the resulting benefits. The third goal is to achieve technical innovation. Actors agreeing with it assign a great importance to the technological level of the farm; hence, they aim primarily at stimulating the purchase new technologies (machineries, high-yielding varieties of seeds, fertilizers, irrigation systems, etc.). These three goals are usually encountered together, as, for example, higher per capita incomes increase saving rates and, thus, investments and productivity (Heidhues & Schrieder, 1999). However, they can also enter in contradiction, especially when one of them becomes a priority to the detriment of the others.

Table 1. List of divisive topics concerning agricultural financing policies.

Topics	References
Goal 1: increasing farm incomes / rural salaries	Heidhues & Schrieder, 1999
Goal 2: increasing productivity	Heidhues & Schrieder, 1999; Meyer & Nagarajan, 1996
Goal 3: stimulating technological innovation	Carter, 1989; Rosenzweig & Binswanger, 1993; Vicente & Vosti, 1995
Target 1: profit-oriented (vs. subsistence farmers)	Diaz Osorio, 2007; Hazell et al., 2007
Target 2: family farmers (vs. juridical persons)	Diaz Osorio, 2007; Hazell et al., 2007
Target 3: specific productions (vs. single farm payment)	Helfand, 2001
Target 4: small farms (vs. large farms)	Helfand, 2001
Target 5: export productions (vs. self-consumption goods)	Helfand, 2001

Instrument 1: financial sustainability of the credit programme	Kumar, 2005
Instrument 2: tax concessions for commercialization	Schiff & Valdés, 1992
Instrument 3: fair access to land (property rights), even by means of expropriation	Dethier & Effenberger, 2012; Norder, 2014; Ondetti, 2016
Instrument 4: reduce the power of informal financial intermediaries	Braverman & Guasch, 1986
Instrument 5: ex post assessment for financing continuity	Thomas, 1993; Westercamp et al., 2015
Instrument 6: linking farms and researchers (vs. customer approach)	Sumberg et al., 2012; Kaimowitz et al., 1990
Instrument 7: farmers' training	Schneider et al., 2004
Instrument 8: public subsidies (vs. private loans)	Turvey, 2013; Yaron, 1994
Institution 1: rural advisory services	Meyer, 2011; McMahon, 2012
Institution 2: producers' cooperatives	Ellis, 1992; Birchall & Ketilson, 2009; Smith and Rothbaum, 2013
Institution 3: State agricultural banks	Turvey, 2013; Westercamp et al., 2015; Yaron, 1994

The second group of topics concerns the targets of agricultural financing policies. The first divisive issue is about whether policies should target primarily profit-oriented farmers, who aim at maximizing their revenues, or subsistence and semi-subsistence ones, who strive for achieving decent life conditions. The second dilemma is about whether agricultural credit should be provided primarily to family farms (i.e. physical persons), or to juridical entities (e.g. corporations). This issue is particularly relevant in Brazil, as the concept of 'family farm', after replacing that of 'small producer', was at the core of the mobilizations which led to the approval of Pronaf (Welch, 2015). The third divisive issue opposes the supporters of crediting strategies aimed at specific crops or animal productions, to those favouring the provision of generic loans and subsidies (such as, e.g., the single farm payments of the EU Common Agricultural Policy). The fourth topic opposes the advocates of small farmers, generally moved by equity concerns, and those thinking that large producers deserve a special attention because of their role within the national economy (Helfand, 2001). The fifth topic concerns the destination of the crops and animal productions incentivized by means of loans and subsidies: the actors who agree with this statement consider that export productions (as for Brazil, beef and chicken meat, soy, fruit juice, sugar, cotton, coffee, etc.) should be given priority over those intended for self-consumption, or for local markets. Many of these targets are closely related; indeed, family farmers tend to produce for their subsistence, rather than for profit, and to focus on local markets, rather than on exports (Diaz Osorio, 2007; Hazell et al., 2007).

The third group of divisive topics concerns the instruments, or strategies, for achieving a viable agricultural financing policy. The first divisive issue concerns the financial sustainability of the credit programme. The stakeholders supporting this statement think that the programme should be financially sustainable, i.e. the economic returns (e.g., taxation of resulting profits) should overcome or, at least, cover the costs. The second topic deals with the way farmers should be subsidized; the actors supporting it consider that tax concessions (e.g., on the products commercialized) are preferable to subsidies or loans. According to FAO (2001), the compensation for high taxation on agriculture enables farmers to be more competitive. The third instrument is a controversial one, due to the radical approach it entails: ensuring fair access to land, even by means of a land reform foreseeing expropriation. In large countries with many farmers under the poverty threshold, access to land is an actual issue. The assignment of property rights to disadvantaged people is a driver of innovation adoption and, thus, of farm modernization (Dethier & Effenberger, 2012). The fourth instrument addresses the power of private financial intermediaries, who may adopt an 'exploitative or monopolistic behaviour' (Ellis, 1992, p. 155). The actors supporting this statement aim at addressing the 'corruption' and the lack of accountability of rural financial markets to avoid loan-sharking situations. The fifth instrument deals with evaluation of the way money is used by recipients. The actors supporting such option consider that the continuity of credit provision should be bound to a constant monitoring, or to a positive ex post assessment. Braverman and Guasch (1986) point out that rural financial markets are unable to monitor the use of funds. The sixth instrument concerns the idea of putting in contact public and private re-

searchers with farmers, instead of adopting a customer approach, as improving these connections might ensure a better focus of farmers' priorities (FAO, 2014; Sumberg et al., 2012). A seventh potential instrument of the rural financial system is agricultural training, which is closely related to the previous one. This statement identifies the stakeholders who consider formal education, provided, e.g., by rural extension services, a fundamental accessory element of any credit policy. The last divisive issue with respect to the instruments concerns the nature of the loans: either public or private (market-based). The actors agreeing with this statement prefer public subsidies, while those rejecting it consider that loans should comply with market rules, so that profitability for the issuing institutions prevails over the welfare implications for the recipients. Although they are not exhaustive of all potential instruments, these eight propositions cover a wide range of issues, and are not necessarily in contradiction with one another.

The fourth group of divisive topics deals with the institutions of rural financing. The first one is represented by agricultural extension services. Indeed, credits and subsidies may also take the form of free provision of goods (e.g. better-performing seeds), or services (e.g. training on how to use new seed varieties). The actors agreeing with this statement consider public extension services a key institution. A second type of institutions is represented by cooperatives and farmer groups (either State-sponsored, or resulting from farmers' initiatives), that 'are often used as the ultimate lender to farmers', and may also become 'viable local credit organizations in their own right' (Ellis, 1992, p. 158). The actors supporting this type of institutions consider that credit policies should stimulate cooperation among producers, e.g. by means of *ad hoc* requirements to access subsidies. A third type of institution is represented by State agricultural banks with branches in the major cities, opposed to private credit institutions. Brazil opted very early for a mixed banking system, leaving the States of the Federation free to choose their favourite form (Westercamp et al., 2015). The agents who support this last statement favour the public option. Broadly speaking, the debate on institutions opposes two 'schools of thought': the supporters of public intervention, deemed necessary to attract urban capital, and the advocates of minimalist regulation, who have been dominating during the last decades (Turvey et al., 2013, p. 210).

THE BRAZILIAN CASE STUDY

From the SNCR to Pronaf

Brazil is 'a relatively industrialized middle-income country that maintains a significant family farm sector oriented to the domestic market, while also playing a key role in the global agri-food sector as a dominant agricultural exporter' (Graeub et al. 2016, pp. 1-2). This strong dualism, that is likely to be reflected in the farm financing system, together with the fact that agriculture is still playing a fundamental economic, commercial and social role (FAO, 2017), justifies the choice of this country as a case study. To support the agricultural sector despite the import substitution industrialization strategy, the Federal Government has implemented different public policies along the years. These include macroeconomic interventions (fiscal, monetary, trade and exchange rate policies), sectoral ones (rural credit, technical assistance, price and market policies, etc.), as well as intersectoral ones (economic, infrastructural, labour, environmental, social, territorial planning, etc.) (Delgado, 2001; Heredia et al., 2010). Among sectorial policies, rural credit was of paramount importance for the transformation of Brazilian agriculture.

The SNCR was created by law 4829 of November 5th, 1965 to support agricultural investments (from the purchase of farm equipment, to the building of infrastructures), cover the costs of production and commercialization of farm output, increase productivity, etc. Indeed, it allowed a successful transformation of the technical assets of the farms, an increase of agricultural productivity, the consolidation of agro-industrial complexes, as well as the integration of agricultural capital in financial networks (Leite, 2001). However, until the middle of the Nineties, the SNCR had been favouring the medium and large farms located in Central and Southern Brazil, that produce coffee, soy, sugar cane, oranges and cotton, and are mostly export-oriented (Helfand, 2001; Gonçalves Neto, 1997; Graziano da Silva, 2003). A relevant share of farms, accounting for about 70 per cent of the total, did not have access to credit (Bianchini, 2015, p. 16) and, therefore, could not enjoy the benefits of the SNCR. These consisted mostly of family farms, which represent about 85 per cent of the production units of the country, and use 31 per cent of its total farmland (Guanziroli et al., 2001).

The political liberalization that followed the end of the military dictatorship in the Eighties allowed for the rebirth of civil society organizations, such as trade unions and social movements inspired by rural workers and family farmers. The latter demanded a new agricultural policy, targeted on small producers (Picolotto, 2011). Pronaf was established within this social framework, in August 1995. By recognizing the peculiarities of family farms, the new norms provided rural credit to this socioeconomic group at favourable conditions, different from those foreseen by the SNCR (Grisa, 2012). These norms represented the first national-level policy targeting specifically the needs of family farmers (Schneider et al., 2004).

Actors Involved in the Process of Design of Pronaf

Many studies have been focusing on the process of design of Pronaf, as well as on the actors involved and their positions (among others: Bianchini, 2015; Grisa, 2014; Moruzzi Marques, 2004; Picolotto, 2011; Santos, 2011; Schneider et al., 2004). In general, three categories of stakeholders were involved: civil society organizations, political actors, and international multilateral organizations. The first category included two main interest groups: ‘on the one hand, the institutions representing large landlords and the agricultural capital; on the other hand, the institutions which supported the adoption of *ad hoc* policies for small farmers, the consolidation of the agrarian reform, the expansion of the rights of rural workers, and a more sustainable agricultural model’ (Bianchini, 2015, p. 19). Among the former there were the Confederation of Farming and Breeding of Brazil (*Confederação da Agricultura e Pecuária do Brasil*, CNA), the Brazilian Association of Agribusiness (*Associação Brasileira do Agronegócio*, ABAG), the Brazilian Rural Society (*Sociedade Rural Brasileira*, SRB) and the Organization of Brazilian Cooperatives (*Organização das Cooperativas Brasileiras*, OCB). Even if they did not participate directly in the elaboration of Pronaf, they did have an influence on the discussion about rural credit policies.

The organizations supporting family agriculture included the National Confederation of Agricultural Workers (*Confederação Nacional dos Trabalhadores na Agricultura*, CONTAG), as well as groups born more recently, like the Landless Workers’ Movement (*Movimento Sem Terra*, MST), and the National Department of Rural Workers of the Workers’ Unified Centre (*Departamento Nacional dos Trabalhadores Rurais/Central Única dos Trabalhadores*, DNTR/CUT). Although their programmes and goals were slightly different (Grisa, 2012; Picolotto, 2011), they joined together with other organizations of fishermen, natives, rubber trappers and other groups damaged by the national agricultural policies in order to organize the first Brazilian Land’s Cry (*I Grito da Terra Brasil*), which took place in the capital in May 1994. In 1995, a second Cry was organized¹. These mobilizations were at the core of the creation of Pronaf, as they forced the Ministry of Agriculture and the Bank of Brazil to negotiate with the organizations representing family agriculture (Vasconcellos & Vasconcellos, 2012), and to implement the course of action favoured by them (Wesz Jr., 2010).

The so-called political actors consist of individuals belonging to State institutions. They may represent different interests (their social basis, their political party, their territory, etc.), and be subject to contrasting pressures (interest groups, the desire to achieve re-election, etc.). Between 1995 and 1998, eight main parties were represented in the Chamber of Deputies and the Senate: the Brazilian Democratic Movement Party (*Partido do Movimento Democrático Brasileiro*, PMDB), the Liberal Front Party (*Partido da Frente Liberal*, PFL), the Brazilian Social Democracy Party (*Partido da Social Democracia Brasileira*, PSDB), the Progressive Party (*Partido Progressista*, PP) – which became the Brazilian Progressive Party (*Partido Progressista Brasileiro*, PPB) after a number of splits –, the Brazilian Labour Party (*Partido Trabalhista Brasileiro*, PTB), the Workers’ Party (*Partido dos Trabalhadores*, PT), and the Democratic Labour Party (*Partido Democrático Trabalhista*, PDT) (Braga and Bourdoukan 2010).

As for international organizations, the most influent during the elaboration of Pronaf were the World Bank, and the Food and Agriculture Organization of the United Nations (FAO) (Flexor & Grisa, 2014). The former, known for its support of free-market policies (Wade, 2010), carried out some

¹ The I and II Brazilian Land’s Cry refer to a wide range of mobilizations carried out by social movements throughout the country: State Governments and the Federal Government negotiated a series of guidelines with these movements, mainly regarding rural policies (Picolotto, 2011). Such mobilizations continued in later years.

studies in collaboration with Brazilian researchers, whose findings were summarized within reports (World Bank, 1994a; 1994b), and divulged to the general public by means of workshops and other events. Simultaneously, the FAO – in cooperation with the National Institute for Colonization and Agrarian Reform (INCRA), and with the support of Brazilian researchers – worked on the elaboration of an operative definition of family agriculture, underlying the economic and social role of this sector for Brazil. FAO’s definition could then be used to design public policy interventions specifically targeted on this group (Guanziroli, 1995).

METHODOLOGY AND DATA

Discourse Network Analysis

Political discourses are often neglected in the explanation of political processes (Schmidt & Radaelli, 2004), despite their role in shaping the actions of political actors (Schmidt, 2008). The presence of discourse coalitions, i.e. groups of actors sharing the same social construct (Hajer, 1993), affects political processes because each coalition tries to impose its perspective on others. This is pointed out within the Advocacy Coalition Framework (Sabatier, 1988; Sabatier & Jenkins-Smith, 1993), which assumes that policymaking is an ongoing process, and political groups with similar interests and beliefs are expected to collaborate to reach their goals.

Discourse Network Analysis (DNA) is a method developed by Leifeld (2009) to measure and visualize policy discourses that relies on the Advocacy Coalition Framework literature. It uses concepts derived from Social Network Analysis (SNA) to map the relationships among a group of actors and analyze their network’s characteristics. DNA identifies discourse coalitions measuring similarities among actors based on their statements. By considering both actors and concepts, DNA identifies sub-coalitions within a discourse coalition: actors are not classified on separated categories, but may be connected through various paths. It has been used to analyze political or media discourse on environmental (Fisher et al., 2013) as well as economic themes (Leifeld, 2013; Leifeld & Haunss, 2012). To our knowledge, this is the first attempt to use DNA in assessing issues related to agricultural policy.

For our research, we firstly computed two ‘actor congruence networks’: the first one indicating the number of statements on which each pair of actors agrees; the second one indicating the number of statements on which each pair of actors disagrees. In both networks, the strength of the tie (edge weight) between two actors depends on the number of common (positive or negative) statements. From these two networks, it is possible to draw the ‘conflict network’ (Leifeld & Haunss, 2012). The ‘conflict network’ indicates the number of statements on which each pair of actors have a discordant opinion. Within a ‘conflict network’, the thickness of the edge weights is computed by summing up the number of discordances between actors on the same statement.

Once the abovementioned network has been created, network statistics are used to detect the actors who are most influential because of their linkages. Network statistics give a quantitative measure of the power of each actor, and a statistical interpretation of her centrality. We used ‘betweenness centrality’ to detect the actors’ relevance. This indicator considers the whole network when computing individual scores, and points out to where actors are placed within the network. It is computed by using the following formula:

$$BC_k = \sum_{i \neq j \neq k} \frac{\sigma_{ikj}}{\sigma_{ij}}$$

where σ_{ikj} is the number of geodesics linking actors i and j through k , and σ_{ij} is the total number of geodesics linking actors i and j . This measure identifies within the network actors that are strategic because of their position, as it has been demonstrated that, sometimes, network location is more important than the number of connections (Prell, 2012). Since we are interested in analysing the political discourse framework that emerged during the discussion of Brazil’s Pronaf, ‘betweenness centrality’ allows us to understand which actors were in a less conflicting position: a low level of ‘betweenness centrality’ indicates that an actor is not involved in conflicts, while a high level denotes the involvement of an actor in many conflicting situations.

Data Collection and Coding Procedure

The dataset for the analysis was created using the following procedure. First, we selected relevant documents to extrapolate actors' statements on every single issue. Four types of documents were considered: public declarations, original reports, parliamentary speeches, and newspaper articles, all dating back to the three-year period 1994-1996. Overall, we analyzed 123 documents, containing 222 statements. As for international organizations, the reports we considered were published by the FAO or the World Bank on their own (Guanziroli, 1995; World Bank, 1994a; 1994b). These reports highlighted the need for State institutions to correct market failures, and to strengthen family farming in Brazil. As for trade unions and social movements, they have produced many documents and reports on this argument; hence, to assess their role in the negotiation process, we considered their official public declarations, institutional reports, and newspaper articles. Finally, as regards political actors, documented debates (i.e. speeches delivered) in the Brazilian Senate during the plenary sessions of the three-year period 1994-1996 were analyzed to identify the orientation of political parties. Among the senators whose speeches were analyzed, at least two (Jonas Pinheiro e Júlio Campos) belonged to the *Bancada Ruralista*. We decided not to consider the debates that took place in the parliament, because they were mainly focused on local issues; hence, they were not useful to understand the position of the parties on the general principles concerning agricultural financing. Due to the large amount of declarations available, the search terms 'Pronaf', 'rural credit', and 'agricultural financing' (in Portuguese and English language) were used to identify potential speeches of interest within the database of the Senate (Brazil, Federal Senate, 2017).

Table 2. Heatmap: positive statements (green), negative statements (red), and lack of opinion (white).

Statement	MST	CNA	ABAG	SRB	WB	CUT	CONTAG	PP	PFL	FAO	PTB	PMDB	PRN	PDT	PPB	PT
Goal 1																
Goal 2																
Goal 3																
Target 1																
Target 2																
Target 3																
Target 4																
Target 5																
Instrument 1																
Instrument 2																
Instrument 3																
Instrument 4																
Instrument 5																
Instrument 6																
Instrument 7																
Instrument 8																
Institution 1																
Institution 2																
Institution 3																
Total	17	16	16	16	9	17	17	15	13	14	10	14	8	8	8	12

Secondly, we conducted the coding process manually, based on the list of divisive topics derived from the abovementioned review of the literature on agricultural financing. For each of the 19 topics, we registered whether an actor showed agreement, disagreement, or lacked any opinion on it. Overall, 26 physical or juridical persons belonging to 16 different organizations (which represent our actors proper) were considered. We considered the opinions expressed by individual senators as representative of the position of the party they belonged to. In case of more than one senator belonging to the same party, the opinions expressed could be considered jointly, since we observed no contrasts amongst them. The outcome of the coding procedure is illustrated in Table 2. This was analyzed using the DNA software (Leifeld, 2010) and Ucinet (Borgatti et al., 2002).

RESULTS AND DISCUSSION

Analysis of the Results

This section presents the results of the analysis and discusses them. In particular, we identified the actors who managed to prevail, i.e. to contribute more to the final policy outcome by avoiding conflicts. Table 3 provides an overview of the divisive topics mentioned in the documents: it shows the percentage of actors who dealt with each topic, specifying whether their statements were in favour or against. Three important insights can be gained from Table 3. First, economic goals such as raising farm incomes, productivity and profits were always mentioned, while topics related, for example, to socio-political aspects, such as reducing the level of corruption, providing training, developing advisory services, and implementing an ex post assessment of the way money was used played a minor role. Second, despite being mentioned by many, the topics linked to general financial issues, i.e. export (target 5) and financial sustainability of the programme (instrument 1) are supported by only a few stakeholders. In particular, only 8 per cent of those mentioning the financial sustainability of the policy, and 27 per cent of those mentioning the support for export productions agreed with these arguments. Third, the most divisive topics were the support for specific productions (target 3), the adoption of measures to grant a fair access to land (instrument 3), and the creation of State agricultural banks (institution 3), indicating that government intervention was the matter of debate.

Table 3. Percentage of actors mentioning each topic, and percentage of actors agreeing or disagreeing.

Statement	Mentioning (%)	Agreeing (%)	Disagreeing (%)
Goal 1: increasing farm incomes/salaries	100	100	0
Goal 2: increasing productivity	100	100	0
Goal 3: stimulating technological innovation	94	93	7
Target 1: profit-oriented farmers	100	94	6
Target 2: family farmers	88	79	21
Target 3: specific productions	56	56	44
Target 4: small farmers	81	77	23
Target 5: export productions	94	27	73
Instrument 1: financial sustainability	75	8	92
Instrument 2: tax concessions	69	73	27
Instrument 3: fair access to land	56	56	44
Instrument 4: reduce power of informal intermediaries	0	NA	NA
Instrument 5: ex post assessment	13	100	0
Instrument 6: linking farms and researchers	69	100	0
Instrument 7: farmers' training	31	100	0
Instrument 8: public subsidies	94	73	27
Institution 1: rural advisory services	38	100	0
Institution 2: producers' cooperatives	69	100	0
Institution 3: State agricultural banks	81	69	31

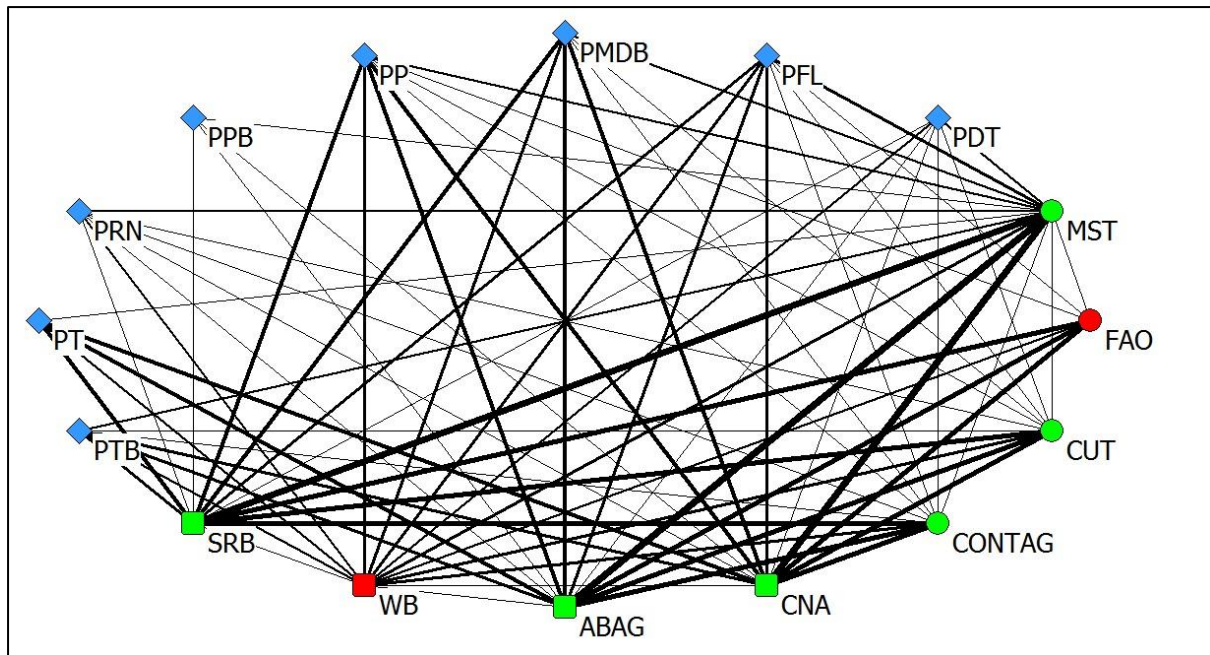
Figure 1 represents the ‘conflict network’; the two ‘actor congruence networks’ can be found in the Appendix. There is a clear grouping of the stakeholders into two distinct coalitions: one including the SRB, ABAG and the CNA, another including the MST, CUT and CONTAG. The network structure is coherent with Leifeld and Haunss (2012), who argue that strong polarization is not generally found in policy conflicts; nevertheless, their presence might be interpreted as an indicator of the significance of the conflict. In Brazil, rural credit has a great socio-political relevance, and has been used by the Brazilian government to create political consensus on several occasions (Garcias & Kassouf, 2016), meaning that it is matter of debate within the political arena.

The group composed of the SRB, ABAG and the CNA (hereafter, the ‘productivity-focused group’), which was more in line with the World Bank, supported a market-oriented reform, while the group including the MST, CUT, and CONTAG (hereafter, the ‘welfare-focused group’) was more related to FAO’s beliefs. The conflict derived from background principles: the former group defended the interests of business farming, while the latter represented the interests of small producers. Santos

(2011, p. 123) points out to the presence of two coalitions in dispute (*‘duas coalizões em disputa’*) about agricultural policies².

Moruzzi Marques (2004) points out that the official documents on small production and family farming elaborated by the CNA represent this group – either implicitly or explicitly – as having aspirations and claims similar to those of large producers. The CNA, the SRB and ABAG were opposed to the creation of a differentiated line of rural credit for family farmers exactly because they did not agree with the idea that family and business agriculture were experiencing different working conditions. Nevertheless, after the start of the political debate on agricultural financing (which then led to the introduction of Pronaf), these organizations tried to influence the discussion on the shape of the programme to ensure more flexible eligibility criteria for their social base³.

Figure 1. ‘Conflict network’ of the actors involved in policy debate on Pronaf.



Note: Squares indicate the actors belonging to the productivity-focused group, circles the actors belonging to the welfare-focused group, and diamonds other actors. Political organizations are marked in blue, civil society organizations in green, and international organizations in red.

Looking, again, at Figure 1, there are three more actors that seem to conflict with the productivity-focused group: the PP, the PMDB, and the PT. Although the intensity of their conflict with such group is more intense, the first two actors disagree also with (a smaller number of topics supported by) the welfare-focused group; instead, the PT discords only with the productivity-focused group⁴. The PT and the PPB are the actors with the lowest level of hostility within the network, even if the former expressed a (positive or negative) statement on twelve topics, while the latter only on eight (Table 3). Their limited conflict is confirmed also by network statistics: as shown in Table 4, these

² This dispute resulted in the creation, in 1999, of two Ministries dedicated to agricultural themes: the Ministry of Agrarian Development (*Ministério do Desenvolvimento Agrário*), dealing with family farming, local development and agricultural planning, and the Ministry of Agriculture, Livestock and Supply (*Ministério da Agricultura, Pecuária e Abastecimento*), focused on large farm businesses and public policies for entrepreneurship.

³ For example, as regards Pronaf's eligibility criteria, the productivity-focused group supported the idea that the family management had to be the only criterium to classify the producing entities, regardless of property size, income, and the presence of employees. The CNA put pressure on the Ministries to include, as eligibility condition, the presence of two permanent workers (which, indeed, became a rule of Pronaf), while CONTAG considered that the presence of temporary employees would have been enough (Grisa, 2012; Santos, 2011).

⁴ The PT conflicts with the MST on two topics, but the MST expressed disagreement on them, contrary to all the other actors. For this reason, the MST has at least one conflict edge with every actor, i.e. it has the highest value of *betweenness centrality* (Table 4).

parties have the same (lowest) value of ‘betweenness centrality’ (0.231), while the members of the productivity-focused group have the highest values.

The MST appears with the highest score in Table 4 because, in addition to opposing the interests of business agriculture organizations (the CNA, ABAG and the SRB), it had divergent positions from CONTAG and CUT on some issues (Picolotto, 2011). Although the MST recognized the importance of agricultural financing under differentiated conditions for family farmers, its priority was represented by the agrarian reform to achieve a more equitable access to land. Moreover, they did not share the view that agricultural financing should aim at raising the technological level of the farms to increase profits, since this is the logic of capitalist business agriculture, and the movement supported traditional production methods.

Table 4. ‘Betweenness centrality’ indicator (actors listed in decreasing order).

Actor	‘Betweenness centrality’	Actor	‘Betweenness centrality’
MST	8.082	PFL	0.607
CNA	7.852	FAO	0.356
ABAG	7.852	PTB	0.322
SRB	7.852	PMDB	0.322
WB	5.332	PRN	0.322
CUT	2.356	PDT	0.322
CONTAG	2.356	PPB	0.231
PP	0.607	PT	0.231

A possible explanation of the network position assumed by the PT and the PPB can be related to the topics they oppose. The PPB is the only actor that did not express any negative statement, while the PT opposed only one topic: like most of the actors (except for the productivity-focused group), it opposed the idea of giving priority to export crops over subsistence production. The larger centrality values observed among the actors belonging either to the productivity-focused or the welfare-focused group is pointing to their involvement in more conflictual situations. Nevertheless, the members of the latter show lower levels of ‘betweenness centrality’, which probably favoured the approval of the final structure of Pronaf.

Discussion

Result suggest that two conflicting coalitions (what we call ‘productivity-focused group’ and ‘welfare-focused group’, respectively) emerged during the discussion of Pronaf. Since we observe multiple and complex linkages among the stakeholders, including those belonging to different groups, the final structure of the policy should have been the result of political negotiations. In order to assess the relative success of the groups, it is necessary to identify the elements that have been either included or excluded from the norms finally approved in 1996⁵. Table 5 provides an overview of the outcome of the negotiations.

Specific funds for interventions aimed at increasing farm incomes (goal 1), raising productivity (goal 2), stimulating the adoption of new technologies (goal 3), as well as for profits-oriented farms (target 1) were established through Pronaf, since every actor (except for the MST) agreed that rural credit should help achieve these objectives.

The financial sustainability of the programme (instrument 1) was not introduced in the norm, since it was decided to adopt a fixed interest rate (Bianchini, 2015). Obviously, Pronaf was created with a primary focus on family business (target 2), and the funds target specific productions (target 3), rather than foreseeing any form of single farm payments. Therefore, on the one hand, Pronaf created a rural credit programme specific for family agriculture (which did not exist in the SNCR); on the other hand, it maintained an operating logic similar to the SNCR, adopting a sectorial perspective, i.e. by product and not by farm (Grisa et al., 2014).

⁵ Pronaf was established by the Decree of the President of the Republic no. 1,946 of June 28, 1996.

Interventions on land ownership (third instrument) were not included amongst the action lines of the policy, since this issue was being addressed by other programmes⁶. Moreover, the main policy tool of the agrarian reform was ‘the legalization of land already occupied by peasants or the distribution of public land’ (Vergara-Camus & Kay, 2017). The decision to support primarily small business (target 4), as well as the establishment of local production groups (institution 2) are related to the emphasis on family farms. Their introduction within Pronaf is illustrative of the ‘defeat’ of the productivity-focused group. Many stakeholders supported the development of an integrated system between research and family farming (instrument 6), and some of them (family farming organizations and the FAO) were in favour of organizing farmers’ training activities (instrument 7), leading to their incorporation within the policy.

Pronaf introduced rural advisory services (institution 1) for the first time in Brazil. These institutions were organized into local (County Councils for Rural Development, *Conselhos Municipais de Desenvolvimento Rural*), State (State Council for Pronaf, *Conselho Estadual do Pronaf*) and Federal boards (National Council for Pronaf, *Conselho Nacional do Pronaf*), with the participation of civil society organizations and public administrators.

The importance of the public sector emerges clearly from Pronaf. Indeed, the decree created public banks (institution 3), and public subsidies were preferred to private loans (instrument 8). Furthermore, the preferential support for export crops, which characterized Brazilian agricultural policy during the sixties, seventies and eighties, was not included in Pronaf, in order to stimulate family farm production (which involves self-consumption and a focus on domestic markets) – although it remained within the SNCR. Finally, three of the topics identified were not discussed throughout the political debate and, therefore, were not included in the law: the possibility of introducing a monetary compensation for the taxation of agri-food products (instrument 2), the institution of anti-corruption norms for reducing the power of informal intermediaries (instrument 4), and the development of ex post evaluation schemes for avoiding the misuse of public funds (instrument 5). While anti-corruption measures and policy evaluation tools were (almost) never mentioned by the stakeholders in the political debate, the introduction of tax concessions was supported by the productivity-focused group. Interestingly enough, these topics were not relevant for the PT, the least conflicting actor of the network, which never mentioned them.

Table 5. Final policy outcome: topics included (green), excluded (red), or not discussed (white).

Statement	Inclusion
Goal 1: increasing farm incomes/salaries	
Goal 2: increasing productivity	
Goal 3: stimulating technological innovation	
Target 1: profit-oriented farmers	
Target 2: family farmers	
Target 3: specific productions	
Target 4: small farmers	
Target 5: export productions	
Instrument 1: financial sustainability	
Instrument 2: tax concessions	
Instrument 3: fair access to land	
Instrument 4: reduce power of intermediators	
Instrument 5: ex post assessment	
Instrument 6: linking farms and researchers	
Instrument 7: farmers’ training	
Instrument 8: public subsidies	
Institution 1: rural advisory services	
Institution 2: producers’ cooperatives	
Institution 3: State agricultural banks	

⁶ Pronaf does not intervene in the subject of land ownership. This issue was handled by the National Institute of Agrarian Reform (*Instituto Nacional de Colonização e Reforma Agrária*, INCRA), with the creation of dedicated rural settlements, and the ‘market-assisted land reform’ (Heredia et al., 2013; Mendes Pereira, 2007).

The final shape of Pronaf was thus the outcome of negotiations between two well-defined groups, which were diverging on several issues. The conformation of the groups was due to the polarization of the Brazilian society (CONTAG, CUT and the MST on one hand; the CNA, ABAG and the SRB on the other hand). This cleavage was strengthened by the alignment of Brazilian political parties along it, and by a diverging orientation between social movements – which were able to keep their autonomy with respect to political parties – and other organizations. In 1995, during the government of Cardoso, most of the parties with senators belonging to the *Bancada Ruralista* (the PP, the PFL, the PMDB, the PRN and the PTB) were part of the parliamentary majority (Vigna, 2007). Therefore, their conflict with the productivity-focused group emerging from the analysis may be due to political opportunism, rather than to diverging economic interests. This is the case of the PP and the PMDB, who were close to the agri-business.

Instead, the PT and the PDT presented more affinity with FAO's proposals, and with the associations supporting family farmers (although they adopted a non-conflicting stance on most issues). Overall, only one of the positions of the PT (i.e., the need of an agrarian reform) was not reflected in the legislation. This party managed to have the options favoured by the welfare-focused group (to which it belonged) approved, without entering in an open conflict with the productivity-focused one.

We can thus conclude that the welfare-focused group managed to shape Pronaf according to its beliefs, but some of the issues backed by its members were not included in the final document, probably because of a political agreement with influential stakeholders like the PT, or due to the strong opposition of the productivity-focused group. In any case, the mobilization of the social movements representing family agriculture (mainly in the framework of the Brazilian Land's Cry) was key to the approval of Pronaf, as it gave visibility to the demands of this sector, allowing them to entered the public agenda (Bianchini, 2015; Grisa, 2014; Moruzzi Marques, 2004; Picolotto, 2011; Schneider et al., 2004).

CONCLUSIONS

The analysis of competing coalitions in political debates is becoming increasingly popular in policy studies; however, empirical findings concerning agricultural policies are missing. Our study aimed at filling this gap by focusing on the Brazilian National Program for Strengthening Family Agriculture (Pronaf), which was created to provide credit to family farmers at favourable conditions. Through our analysis we were able to identify the actors involved in this process, and their positions with respect to potential changes in the Brazilian agricultural financing policy. A prominent role was played by international organizations (World Bank, and FAO), as often occurs in developing countries. Amongst internal stakeholders, there was a convergence on certain issues, while others were a matter of debate. Such duality was a matter of debate for the above international institutions, which were interested in promoting their vision of the Brazilian agricultural sector. In turn, their partially contrasting visions were used by Brazilian parties, unions, and business associations to legitimate their positions on specific issues.

One of the limitations of this study consists in the limited number of declarations identified to extract the statements of the single stakeholders. Since Pronaf was created in 1996, when the press and institutional documents were rarely digitalized, it was very difficult to find more than a couple of documents per stakeholder. For this reason, we assumed that each physical person belonging to an organization (a political party, a union, a business association) was following the guidelines of this organization and was thus representing its positions. The goodness of our choice was confirmed by the fact that we found no discording opinions in the (few) cases in which we had multiple individual declarations per organization.

Although Pronaf has been evolving since the nineties, we decided to focus on a specific period: specifically, the years of its creation. A longitudinal study would allow understanding how changes in the political discourse have been reflecting on the programme in the years following its approval, and especially after the PT came to power in 2003. Indeed, rather than observing a progressive opening to more radical instances, represented by social movements like the MST, we assisted to a gradual emptying of the provisions of Pronaf, that culminated in the abolition of the Ministry of Agrarian Devel-

opment after the impeachment of Dilma Rousseff in 2016. Further research developments should thus consider the evolution of Pronaf along years, with a particular focus on the changes introduced by the governments of the PT. This would make possible to assess whether the objectives of the organisations belonging to our ‘welfare-focused group’ (the MST, CUT, and CONTAG) have been pursued or, rather, the PT has made a mockery of their requests.

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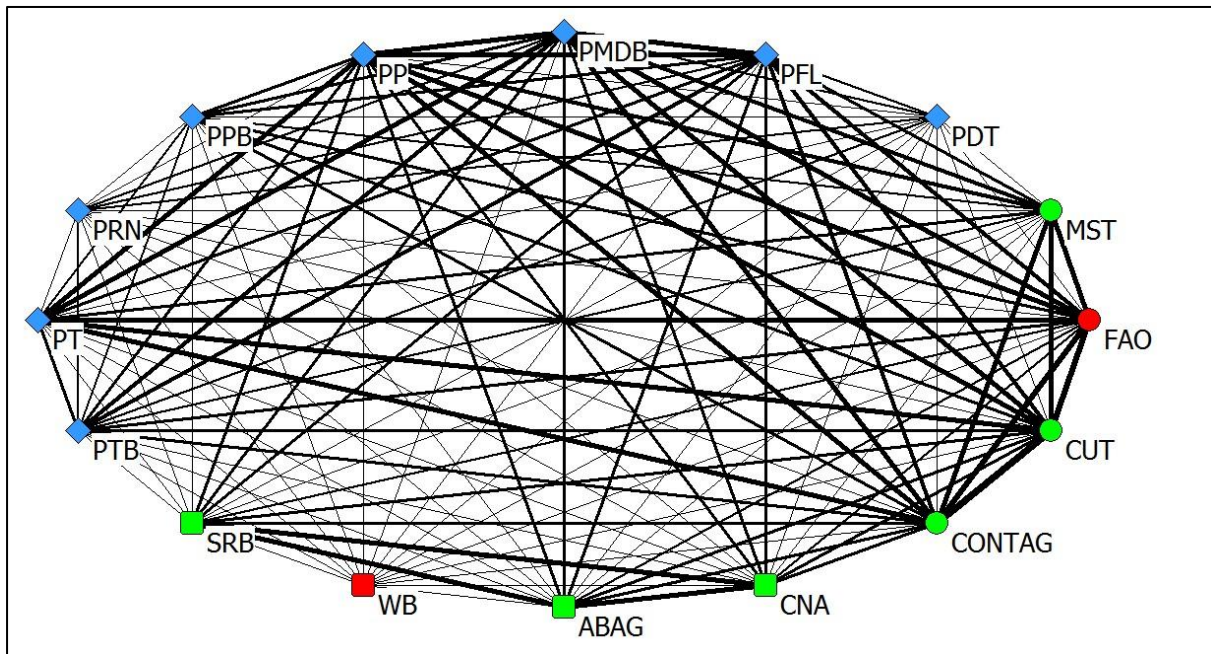
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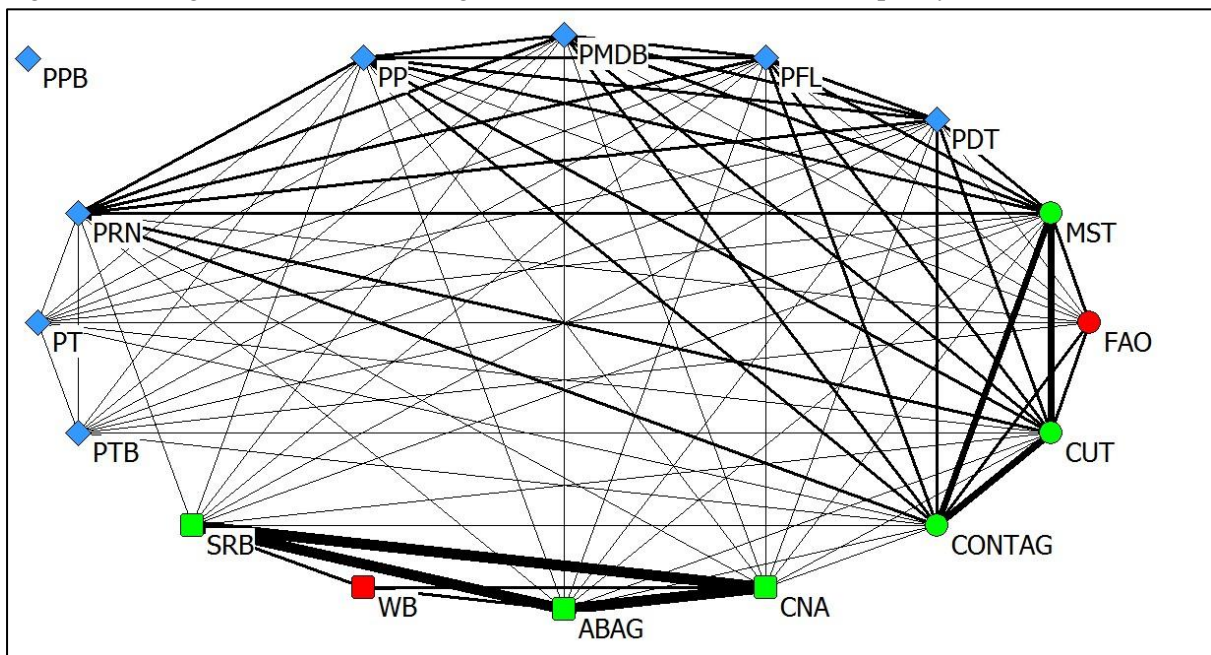
Appendix

Figure 1A. Congruence network: agreements of the actors involved in policy debate on Pronaf.



Note: See Note to Figure 1.

Figure 2A. Congruence network: not agreements of the actors involved in policy debate on Pronaf.



Note: See Note to Figure 1.