

Stability and Institutional Changes in Productive Agglomerations

Estabilidade e Mudanças Institucionais em Aglomerações Produtivas

Celio Favoni¹ⁱ, Orcid: <https://orcid.org/0000-0003-3964-9715>; **Mario Sacomano Neto**²ⁱⁱ, Orcid: <https://orcid.org/0000-0002-2561-1700>; **Luiz Fernando de Oriani e Paulillo**³ⁱⁱⁱ, Orcid: <https://orcid.org/0000-0003-2627-7887>; **Diego Rorato Fogaça**^{4iv}, Orcid: <https://orcid.org/0000-0002-1909-5236>

1. Faculdade de Tecnologia de Jahu - SP – Brasil. E-mail: favoni@hotmail.com
2. Universidade Federal de São Carlos - UFSCar - SP – Brasil. E-mail: msacomano@ufscar.br
3. Universidade Federal de São Carlos - UFSCar - SP – Brasil. E-mail: dlfp@ufscar.br
4. Universidade Federal do Mato Grosso do Sul – UFMS, MS, Brasil. E-mail: fogaca.diego@gmail.com

Abstract

The study of institutional change is an area of research in organizational theory, and the study of regional politics is on the institutional research agenda. This implies exploring how institutions matter for regional development and how the role of the State impacts the environment of regions formed by micro and small businesses. Thus, this article presents and analyzes the type of institutional change in the productive agglomeration of footwear in Jaú/SP. This is a case study of a descriptive, exploratory, and historical nature. The mixed approach subsidized the methodology with quantitative analysis of economic data and qualitative analysis of data collected through documents and an interview script with nine actors linked to the governance of the cluster. The results pointed to the layered type of change where small modifications are introduced and coexist with old practices. The events altered the socioeconomic conditions but did not modify the institutional structure.

Keywords: institutional theory; institutional change; cluster.

Resumo

O estudo da mudança institucional é uma área de pesquisa na teoria organizacional, e o estudo de políticas regionais está na agenda de pesquisa sobre instituições. Isso implica explorar como as instituições importam para o desenvolvimento regional e como o papel do Estado impacta no ambiente de regiões formadas por micro e pequenos negócios. Assim, este artigo apresenta e analisa o tipo de mudança institucional na aglomeração produtiva de calçados de Jaú/SP. Trata-se de um estudo de caso de natureza descritiva, exploratória e histórica. A abordagem mista subsidiou a metodologia, tendo a análise quantitativa para os dados econômicos e análise qualitativa para os dados coletados por meio de documentos e um roteiro de entrevistas com nove atores ligados à governança do aglomerado. Os resultados apontaram o tipo de mudança em camadas, quando pequenas modificações são introduzidas e coexistem com práticas antigas. Os eventos alteraram as condições socioeconômicas, mas não modificaram a estrutura institucional.

Palavras-chave: teoria institucional; mudança institucional; aglomerações produtivas.

Citação: Favoni, C., Sacomano Neto, Mario, Oriani e Paulillo, L. F. & Fogaça, D. R. (2025). Stability and Institutional Changes in Productive Agglomerations. *Gestão & Regionalidade*, v. 41, e20259004. <https://doi.org/10.13037/gr.vol41.e20259004>



1 Introduction

Institutional Theory arouses great attention in the field of organizational studies (Deephhouse & Suchman, 2008; Kluttz & Fligstein, 2016; Morselli, 2021; Fligstein & Goldstein, 2022) by highlighting the influence of regulative, normative and cognitive institutional elements (Beckert, 2010) to explain individual and organizational actions (Coccia, 2018) from the perspective that social action occurs in defined arenas (Fligstein, 2013). The essential premise is that socially shared rules, norms, and assumptions drive organizational decision-making and practices (Tolbert, David, & Sine, 2011). In addition, it provides a non-economic, but rather institutional, explanation of organizational behavior and strategies (Dimaggio & Powell, 2007; Yang & Su, 2014; Morselli, 2021).

The institutional context refers to the set of environmental elements of an institutional and technical nature that involves organizations with which it interacts (Scott, 2001) and can have three levels: local/regional, international, and national (Coraiola, Jacometti, & Baratter, 2015). Although there are several studies on the institutional context, the problem of understanding why and what are the sources of stability and change in an institution persists, and understanding how this occurs is a central challenge for institutionalists (Streeck & Thelen, 2005; Beckert, 2010; Fligstein, 2013).

The study of institutional change is a central area of research in organizational theory (Béland & Powell, 2016; Micelotta, Lounsbury, & Greenwood, 2017), and the literature proposes different theoretical frameworks by maintaining that this process can be the result of external or internal factors, as well as abrupt or incremental shocks (Kingston & Caballero, 2009; Gerschewski, 2021). Institutional change can sometimes be revolutionary and, at other times, slower or fragmented (Fligstein, 2013). Institutional change can be incremental since it is easier to gain consensus on small adjustments that can cause major changes to existing rules (Mahoney & Thelen, 2010; Kingston & Caballero, 2009). Incremental institutional change brings about the understanding of catalysts of change, in which exogenous factors mean mechanisms that trigger institutional change (Coccia, 2018). Seeleib-Kaiser (2008) also points out that, for any analysis of institutional change, a systematic conceptualization of the time period and categories one is analyzing is needed to be able to judge whether changes in the environment constitute a significant change.

In this context, the study of regional policies is included in the research agenda on institutions (Glückler & Lenz, 2016; Benner, 2017; Jacometti, Gonçalves, & Castro, 2014). In institutional analysis, the focus of the analyses ceases to be on one or another social actor, focusing instead on the quality of the relationships between actors (Kluttz & Fligstein, 2016). In this sense, studies of the institutional approach for the analysis of regional development are lacking. The productive agglomeration is understood as an institution because it involves political, economic, and social issues by having values, norms, customs, codes of conduct, and markets (North, 1990; Tavares, Leite, & Carvalho, 2011) or because it contributes to the innovation process of the locality (Barbosa Leite et al., 2023).

One of the hypotheses that this research planned to validate is the importance of the role of institutional actors in the context of regional development (Araujo Aguiar & Moreira, 2022). Studies have indicated evidence of institutionalizing action by the Brazilian Micro and Small Business Support Service (SEBRAE) as an inducing agent of behaviors in productive agglomerations (Tavares *et al.*, 2011) acting as an intermediary of organizational and institutional transformations, as well as a carrier of managerial knowledge for micro and small businesses in recent decades (Rallo & Donadone, 2019).



To contribute to this discussion, the current study aimed to analyze the type of institutional change in the productive agglomeration of footwear in the Brazilian city of Jaú between the years 2001 and 2019, based on the typology developed by Mahoney and Thelen (2010). The typology allowed the identification and classification of events that caused changes in this productive region. The relationship between economic performance and productive agglomerations was also verified when compared with other footwear-producing regions in Brazil. The research results indicated a type of layered institutional change where small modifications are introduced and coexist with old practices, reflecting Streeck and Thelen's (2005) results. The events altered socioeconomic conditions but did not change the institutional structure.

2 Institutions and Institutional Change

The literature suggests different definitions of institutions that affect perspectives for studying and explaining institutional change (Thornton, Ocasio, & Lounsbury, 2012; Coccia, 2018; Samadi & Alipourian, 2021). In the classical definition, institutions are "the rules of the game in a society, or more formally, how conceived human constraints shape human interaction, reducing uncertainty and providing a framework for everyday life" (North, 1990, p. 3). It can also be conceived as "cultural elements – cognitive, normative and regulatory that, with associated activities and resources, provide stability and meaning to social life" (Scott, 2001, p. 48). For Mahoney and Thelen (2010) institutions are relatively enduring characteristics of political and social life and cannot be changed easily or instantaneously. By reducing uncertainty, they provide a structure for everyday life and form incentives in political, social, and economic exchanges.

The concept of institution is central to approaches that aim to understand the processes of institutional change. In the view of Mahoney and Thelen (2010) and Gerschewski (2021), institutions often change in subtle and gradual ways over time. Institutional change has multiple forms and strategies that differ systematically according to the character of the institutions and political scenarios in which they are situated (Béland & Powell, 2016). Thus, theories of institutional change are plural and sometimes contradictory (Maggetti, 2014). To explain the development of institutions, theories sometimes focus on the coordinated efforts of actors to overcome their problems of collective action, or focus on the struggles that produce new forms that create winners and losers (Tang, 2011). In the literature, there is a distinction between authors who study large changes as a result of exogenous shocks and those who study ongoing incremental changes (Van Der Heijden, 2014).

In explaining situations of change, historical institutionalists draw attention to *critical junctures*, understood as periods that open opportunities for agents to change the development trajectory of a policy or institution, resulting in a new path of development that persists for a long period (Capoccia & Kelemen, 2007; Venturini, 2021).

Thelen (2003) and Gerschewski (2021) indicate a theory of institutional change critical of the neo-institutional model of punctuated equilibrium of True, Jones, and Baumgartner (1999) and Shapiro (2002), which advocates the existence of critical moments, that interrupt institutional inertia and provoke radical changes. For theories of institutional change, transformations are determined by the characteristics of the political context, the institution itself, and the type of behavior of the dominant agent of change (Thelen, 2009).



The analysis of change is also related to the notion of *path dependence*, according to which the institutional arrangements established at a given moment become rooted due to their ability to shape the incentives, worldviews, and resources of the actors and groups affected by the institution (Capoccia & Kelemen, 2007). For Béland and Powell, (2016), the concept of *path dependency* implies stability in that it is brought about by endogenous factors that reinforce the *status quo* and that hinder the initiation of a major change.

Institutional arrangements can be defined as sociocultural constructions that prescribe appropriate organizational behaviors and that shape and impose patterns of interests and privileges (Micelotta, Lounsbury, & Greenwood, 2017). The literature has sought to understand how these arrangements are disturbed and altered, why change occurs, who initiates and enacts them, and what the effects are (Greenwood, Oliver, & Lawrence, 2017; Thornton, Ocasio, & Lounsbury, 2012).

Although the greatest interest remains in the explanation of institutional change, stability is a fundamental issue, because to understand it one must explain, in parallel terms, the change (Hall, 2010). The explanation of the stability of market structures garners much more attention than issues of change (Beckert, 2010). For Thelen (2003) and Mahoney and Thelen (2010), change and stability are intrinsically linked and those who benefit from existing agreements may have an objective preference for continuity. However, ensuring such continuity requires the continued mobilization of political support, as well as efforts to resolve institutional ambiguities, where they exist.

On the one hand, the explanation of the process of institutional change is based on exogenous factors; on the other hand, it can also be explained by endogenous factors, where the causal elements of the change result from the behavior of the agents internal to the institutions (Streeck & Thelen, 2005; Mahoney & Thelen, 2010). Institutional transformation is often gradual or subtle, not particularly abrupt, with rather mundane motives (Powell & Colyvas, 2008), where seemingly small changes can accumulate into a significant institutional transformation (Thelen, 2003; Streeck & Thelen, 2005; Mahoney & Thelen, 2010).

2.1 Types of institutional change

The literature uses various terminologies to argue that small incremental changes that accumulate on top of each other can add up to a significant change (Hinrichs & Kangas, 2003; Jensen, 2009; Béland & Powell, 2016). In this article, we used the types of change defined by Mahoney and Thelen (2010), which, despite having reduced predictive capacity, have exceptional value in providing a single set of terms to explain real examples of institutional change (Van Der Heijden 2014). They noted that the main approaches to institutional analysis face problems in explaining change and, as a solution, identified four types of institutional transformations: *displacement*, *layering*, *drifting*, and *conversion*.

Displacement occurs when there is removal and replacement of existing rules and practices by new and unknown templates. It can be abrupt with the collapse of institutions and subsequent replacement by new rules. It can also be a slow and gradual process when new rules and institutions are introduced and compete with older rules, rather than overturning them immediately (Mahoney & Thelen, 2010; Venturini, 2021).

Layering occurs through differentiated growth (Streeck & Thelen, 2005) in which small modifications are introduced and coexist with old practices, that is, the new does not replace the old, but is added to these and thus gradually changes its *status* and structure (Mahoney & Thelen, 2010). This implies the constitution of parallel or overlapping rules but

is related to the occurrence of changes, revisions, and additions to the existing rules, which can result in significant changes in the long term (Mahoney & Thelen, 2010; Venturini, 2021). This is a type of explanation that differs from the equilibrium literature in having a stance that major changes can, and likely will, result from layers of new policies, rules, or agents added to an existing institution, or policy (Béland & Powell, 2016).

The institutional change of drift occurs when the impact of the rules is altered due to changes that have occurred in the environment where the institution is inserted. The formal rules are not modified, but their impact on society varies due to the negligence of the agents regarding the environment (Thelen, 2003; Streeck & Thelen, 2005; Mahoney & Thelen, 2010). Therefore, drift occurs when external changes alter the results of the rules without there having been a change in the rules themselves (Hacker & Pierson, 2015). This mechanism seems to be related to the mechanism described in the literature of punctuated equilibrium where exogenous effects result in institutional change (Van Der Heijden, 2014).

Change by conversion does not imply changes in the formal rules of the institutions but in their application. It is considered that the institutions themselves do not change but are used to serve new purposes (Van Der Heijden, 2014): the agents interested in change do not change the formal rules but reinterpret them in a way that modifies the *status quo*. The *conversion* strategy does not result from the negligence of the agents. It is strategically produced by agents who exploit institutional ambiguities to provide change and give new purpose to institutions (Rocco & Thurston, 2014).

Understanding these different types of institutional change—including the roles that institutional supporters and challengers typically play within each—aids in understanding the dynamics, stability, and crisis of clusters.

3 Methodology

This is a mixed research using the technique of survey and analysis of economic data (quantitative) and semi-structured interviews to obtain information on the formation and governance of the cluster (qualitative). The case study strategy was adopted in the productive agglomeration of women's shoes in Jaú/SP. This qualitative research method can be used for a variety of analysis purposes and is particularly strong and most often used for theory construction and validation purposes. It is characterized by an emphasis on the perspective of the individual being studied. The subjective reality of the individuals involved in the survey is considered relevant and contributed to the development of the research (Hancock, Algozzine, & Lim, 2021).

3.1 Data collection

In the first phase, a search was conducted for official documents detailing the history and formation of the footwear sector, the composition of the board, and news on the official website of the Employers' Union (Sindicalçados, 2022), as well as secondary data from the Annual Social Information List – RAIS (2022) and the State Data Analysis System Foundation (Seade, 2022).

In addition, there was the collection and analysis of documents made available by the Unions, as specified in Chart 1. With this, the search for documents that supported the development of the study was completed.

The steps to conduct this stage were: collection of news, analysis of projects and documents, 10 personal visits to the entity in the period from 2017 to 2019, archiving and annotation of the information that presented greater relevance and those related to the theme of the study.

Chart 1

List of documents made available by the Syndicate of Footwear Workers of Jaú/SP

- Financial report of the agreement between the Syndicates and APEX — (PSI) — 2001
- Presentation: Sustainable Development of the Footwear Pole of Jaú – Sebrae Regional Office Bauru - 2002
- Report Study of Business Activity - Footwear Sector Manufacture of Women's Footwear Jaú / SP - Sebrae - 2002
- Strategic Planning Workshop Report – Footwear Sector of Jaú – Sebrae – 2003.
- Presentation Sebrae/SP Program for APLs - Term of Reference in APL - 2003
- Final Project of Execution of Agreements - APL - FINEP - 2005
- APL Development Plan - Companies and Business - Federal Government - 2007
- Technical Notes - A competitiveness agenda for the São Paulo industry, leather and footwear chain - IPT - 2008
- Strategy paper – BRA SPO CLJ – Competitiveness - 2010
- Publicity material Inova Jaú Initiative – Competitiveness - 2010
- Primer Brazil Next – Profile of the footwear industry of Jaú and suggestions for public policies - Observatory of Local Development in the Center of São Paulo - 2014

Source: Prepared by the authors.

After a preliminary examination of the documents, a script of interviews was elaborated with 12 questions about historical events, public policies, and decision-making processes, as well as the challenges faced by the social actors of the cluster (Appendix 1).

3.2 Interviews

The script was assessed by academics and teachers before its use in the field (Mosley, 2013). The interviews were collected between July 2017 and September 2018, totaling 8 hours and 47 minutes of recorded audio, transcribed, and separated into categories that enabled the analysis of the narratives.

The choice of the interviewed actors was intentional by data saturation, where the researcher selects among the population individuals who are good sources of information for the study. Regarding "saturation" or redundancy, it is often used to justify the closure of the collection and the definition of the number of respondents. The criterion to define the closure of the interviews derives from the researcher's observation that continuing with the collection process would not add information that contributes to the development or deepening of each category analyzed by the research undertaken (Lauretto, Nakano, & Pereira, 2012).

Nine interviews were conducted with central actors active in the governance of the cluster, being entrepreneurs, directors of the Employers' Union (Sindicalçados), managers of Sebrae, and representatives of higher education institutions. Chart 2 presents the selected actor, activity developed, and time in the productive agglomeration. As anonymity was requested, the names of the research actors were not listed, and each participant was assigned the letter "E" of the interviewee, followed by a corresponding sequence number.

Chart 2

Interviewed actors, activity, and time in the cluster

Nº	Activity developed	Uptime
E01	38 years as executive director of Sindicalçados	1979 - present
E02	15 years as an entrepreneur and director of Sindicalçados	1998 to 2012
E03	20 years as a businessman, nine on the board of Sindicalçados	1993 to 2013
E04	Grandson of the 1st shoe manufacturer of Jaú	1950 – 2019
E05	5 years as manager of Sindicalçados	2003 to 2008
E06	Project Manager at Sebrae	1998 to 2011
E07	Entrepreneur in the footwear industry	1986 to 2013
E08	24 years as a businessman, and director of Sindicalçados since 1999	1976 to 2015
E09	39 years as a member of the Board of Directors of the Unions and current president	1979 - present

Source: Prepared by the authors.

3.3 Analysis of the results

The documental and narrative analysis allowed the identification of striking historical events in the construction of the social space of the research. It is important to study these documents aiming at the objective of "investigating the social facts and their relations with chronological sociocultural time" (Richardson, 2017, p. 182).

Narratives about events of the creation of the locality, its evolution, consolidation, business practices, and actions of the public power were mapped. This procedure allowed the identification of the central narratives reported by each actor, which could then be associated with the typology of Mahoney and Thelen (2010).

As an additional instrument for validating the economic information collected, two one-factor statistical tests of analysis of variance (ANOVA) were performed to verify the relationship between the data of companies and jobs in the periods analyzed (2002 – 2009 and 2010 – 2019). In the first test, the response variable considered was the variation of the companies, and in the second the number of jobs. The level of significance adopted was 5%, i.e., a confidence level of 95%. The null hypothesis (H_0) considers that there is no difference between the periods, and the alternative hypothesis (H_1) considers that there is at least one period with a different value (Casella & Berger, 2010).

4 Results and discussions

4.1 Economic and historical context of productive agglomeration

The Brazilian domestic market constitutes one of the strengths of the national footwear industry, which absorbed about 86% of production in 2021. Production is concentrated in the state of Ceará with 24% of national production, followed by Rio Grande do Sul (20.8%), Paraíba (18.4%), Minas Gerais (15.1%), and São Paulo (5.5%) (Brazilian Association of Footwear Industries - Abicalçados, 2022). An interesting feature of the Brazilian footwear industry is its ability to organize itself in agglomerations of companies, especially those established in Campina Grande (PB), Sobral (CE), Vale dos Sinos (RS), and the mining centers of Montes Claros and Nova Serrana, representing more than 63.2% of national production (Abicalçados, 2022).

The footwear production cluster of Jaú/SP is formed mostly by micro and small companies (97.3% with up to 99 employees), and 84.4% had up to 19 employees in 2020 (Rais, 2022). It is formally recognized by federal, state, and municipal government agencies, which has allowed its insertion in public policies aimed at the development of business clusters (Secretariat of Economic Development – SDE, 2022). In Jaú, jobs in the footwear sector represented more than 25% of the municipality in 2006 and 2007, and in 2019 this percentage declined to 10.8% (4019 formal workers), lagging behind the commerce and health sectors with 19.48% and 11.37%, respectively (Rais, 2022).

The economic oscillations and the regional displacement of the Brazilian footwear industry affected the production in Jaú, which directs all its production to the Brazilian domestic market. Estimated data from Abicalçados indicated that Jaú produced about 5 million pairs of footwear in 2021, representing only 0.63% of national production, ranking 16th in a *ranking* of 17 producing regions (Abicalçados, 2022).

4.2 Institutional changes in the cluster

A starting point for the study of institutional change is the historical context in which institutions evolve (Streeck, 2009, Maggetti, 2014). The following is a brief account of the events described in the narratives of the research interviewees (Chart 3).

Chart 3

Remarkable events in the formation of the productive agglomeration of footwear in Jaú/SP.

In 1979 - Founding of the Trade Unions
In 1991 - Beginning of the activities of Sebrae Bauru
In 2001 – The Integrated Sectorial Program (PSI) of the Federal Government took place
2003 – Recognition by the government of SP as "Local Productive Arrangement – APL of Jaú" and "Polo calçadista de Jaú"
2006 - Inclusion in the Program for the Strengthening of APLs of the State of São Paulo
2007 – The public event of dissemination of the cluster takes place: "O Salto do Calçado"
2009 - Public Civil Action filed by the Labor Prosecutor's Office against Sebrae Nacional
2010 - Project INOVA JAÚ INITIATIVE with support from Sebrae, Inter-American Development Bank (IDB) and Secretariat of Economic Development
2013 – Realization of the project of the Competitive Innovation Center of the Paula Souza Center
2014 - Last Edition of Local footwear fair "Jaú Trend Show"
2017 - I Tripartite Seminar (Trade Unions, Workers' Union and City Hall)
2019 - Initiative to resume local footwear fairs: Jaú Fashion Show

Source: Elaborated by the authors based on the narratives of the interviewees.

Footwear activity has its origins with the first shoemakers of the early twentieth century, who manufactured shoes and leather boots for workers and the local community. With the decline of coffee and sugarcane production in the 1950s, footwear production became a viable option, gaining economic strength and political projection. In 1979, the association of footwear industries of Jaú was founded, currently Sindicalçados (Chart 3).

With the implementation of the Sebrae unit in Bauru in 1991, companies in Jaú had access to training, courses, and consultancies that expanded from 2001 signing of the PSI with financial contributions from the Export Promotion Agency – APEX and Sebrae.

4.3 Integrated Sector Program (PSI)

This program aimed to increase the exports of footwear from the agglomeration of Jaú, raise the quality standards of production, promote Brazilian footwear, and present to the



international market Brazilian products through fashion. In addition, the PSI generated for the cluster promotional pieces (institutional video, catalog, *CD-Rom*, Banners, gifts, and promotion *kits*, as well as Web platform) financed the participation of local entrepreneurs in international fairs (Micam / Italy, WSA / Las Vegas, GDS / Germany and Francal / Brazil), as well as advertising coverage in magazines specialized in the sector such as *Revista Moda Pelle*, *Ars Sutoria Magazine*, *Vogue Pelle* and *Footwear News Magazine* (Sindicalçados, 2022).

The PSI, in addition to providing financial resources, brought visibility and projects, as there was greater participation and involvement of entities such as Senai, Senac, Higher Education Institutions, and municipal and state public agencies. Although it represents an exogenous factor, the PSI can be considered an event that triggered a series of positive actions such as trade fairs, training, lectures, and consultancies, mainly with the effective participation of entities of System S (Sebrae, Senai, and Senac) such as the project to stimulate the competitiveness of the women's footwear industry in the region of Jaú, led by Sebrae/ Bauru.

Sebrae's performance in promoting regional development originates from its own experiences supporting micro and small companies through specialized consultancies and also supporting sectors and territories (Tavares *et al.*, 2011; Ralio & Donadone, 2019). In 2002, Sebrae prioritized the performance in productive arrangements, and this decision was reinforced in 2003 when it elaborated its strategic planning by signing the Terms of Reference (Chart 3). This policy was supported by a sustainable development program, in partnership with the municipal government and government entities, and it was called "Local Productive Arrangement – APL of Women's Footwear of Jaú", which made resources from public entities such as the Department of Development of the state of São Paulo (SDE, 2022) available.

Economic results in the period between 2002 – 2009 show that there was an increase of 93.94% in the number of companies and 90% in the number of jobs in Jaú – higher than the average increase of other footwear-producing regions, which were 58.55% and 75.99%, respectively (Table 1).

4.4 Public Civil Action and its implications in the cluster

In 2009, the Federal Public Ministry filed a public civil action against Sebrae Nacional, which curbed the outsourcing of labor through cooperatives and legal entities (MPT, 2015). Within this new scenario, several activities were paralyzed at the national level and were reflected in the daily activities of this entity in Jaú, where the actions were directed to only courses and specific actions, no longer within the scope of the Terms of Reference.

Even after this event, some initiatives sought to improve the image of the cluster, resume sales, and establish closer relationships with footwear retailers and wholesalers. In June 2010, the presentation of the "Inova Jaú Initiative" project from the Spanish company *Competitiveness* took place, whose objective was to strengthen the competitiveness of the footwear companies of Jaú (Chart 1). For E06 the *work of Competitiveness came, did all that... then when I was going to start acting, hiring the Consultants... Public Civil Action [...]. So it was an open business.*

Thus, in the period between 2010–2019, the number of formal companies decreased by 45.59% and the number of jobs by 57.24%, which were higher than the average of other footwear-producing regions (-20.56% and -32.20%, respectively). The footwear industries,

which formally employed more than 9,398 people in 2010, reduced this amount to a little more than 4,019 in 2019 (RAIS, 2022). Other footwear producing regions indicated a smaller retraction in economic data in the same period (Table 1).

Table 1

Change in the number of companies and jobs in footwear regions

Municipalities/Periods	Companies ¹		Jobs ²	
	2002-2009	2010-2019	2002-2009	2010-2019
Jaú/SP - Brazil	93,94%	-45,59%	90,73%	-57,24%
Franca/SP - Brazil	29,69%	-27,85%	4,67%	-38,06%
Birigui/SP - Brazil	56,89%	-14,17%	0,85%	-48,76%
St. John the Baptist/SC	78,57%	-8,76%	203,24%	-8,84%
Nova Serrana/MG	33,66%	-6,46%	80,48%	-8,11%
<i>Average</i>	<i>58,55%</i>	<i>-20,56%</i>	<i>75,99%</i>	<i>-32,20%</i>
<i>standard deviation</i>	<i>27,88%</i>	<i>16,27%</i>	<i>82,41%</i>	<i>22,70%</i>

Source: Prepared by the authors based on data from RAIS (2022).

(1) Jobs = total active employment as of 12/31.

(2) Number of industries: IBGE Subsector 12 (1991-1993); CNAE 95 Div (1994-2005) and CNAE 2.0 Div (from 2006).

In 2019 Sindicalçados resumed fostering closer ties with the retail sector and organized the local fair *Jaú Fashion Show*. Despite this initiative and with the emergence of the SARS-CoV-2 pandemic, the Jaú industry saw a reduction in the number of companies (-8.9%) and formal jobs (-26.3%) between 2019 and 2020 (RAIS, 2022).

Although there is a relationship between the performance of the productive agglomeration and the economic crisis and competition, it was necessary to test whether the variation between the periods studied and economic data was significant. Table 2 presents the summary of ANOVA for the data on the variation of companies between the periods studied.

H_0 is rejected when the probability value of the test (p-value) is lower than the significance level (p-value < 0.05). This situation is confirmed when the F-statistic calculated in the test is greater than the critical value of the distribution, considering the same degrees of freedom of the test.

Table 2

ANOVA summary for company variation between the periods 2002-2009 and 2010-2019

Source of variation	<i>SQ</i>	<i>Gl</i>	<i>MQ</i>	<i>F</i>	<i>P-value</i>	<i>Critical F</i>
Companies	1,564835	1	1,564835	30,04282	0,000587	5,317655
Residuals	0,416695	8	0,052087			
Total	1,98153	9				

Source: Research data



Therefore, considering a significance level of 5%, it can be said that the statistical test rejected H_0 (there is no difference between the periods) since the probability value of the test was less than 5% (p-value equal to 0.000587).

Similarly, for the data on employment variations (Table 3), ANOVA also rejected H_0 , since the probability value of the test was less than 5% (p-value equal to 0.022135).

Table 3

ANOVA summary for employment variation between the periods 2002-2009 and 2010-2019

<i>Source of variation</i>	<i>SQ</i>	<i>Gl</i>	<i>MQ</i>	<i>F</i>	<i>P-value</i>	<i>Critical F</i>
Jobs	2,926594	1	2,926594	8,01144	0,022135	5,317655
Waste	2,922414	8	0,365302			
Total	5,849008	9				

Source: Research data

The statistical analysis indicated a reliable difference between the periods and also in the economic results, being more expressive for the productive agglomeration of Jaú when compared with the other regions, corroborating the alternative hypothesis regarding the performance and influence of local institutional actors in the institutional change of the agglomeration. The literature describes that agents can make changes by withdrawing public support from the existing institution, where the results may not initially be perceived as contributing to institutional opposition, although they often are (Rocco & Thurston, 2014).

4.5 Analysis of the results

The narratives and events described in Chart 3 indicated the type of change as *layering*, as this type of change is not due to a single critical conjuncture, but to the progressive insertion of new elements throughout the traditional arrangements, as indicated by Streeck and Thelen (2005). These changes may go unnoticed at the time of their enactment, but after a certain level, they can reach an inflection point that can completely change the functioning of the system (Streeck & Thelen, 2005; Maggetti, 2014).

The 2001 signing of the PSI created conditions for obtaining both financial resources and visibility for the agglomeration since *all the entities came... put a spotlight, and everyone (entities) wanted to offer things to the industry... and it was great* (E01). It was the moment when the institutional support of the State and class entities had great importance when specialized consultancies were made available (Sindicalçados, 2022; Tavares et al., 2011) as well as public resources (SDE, 2022).

However, the Public Civil Action of 2009 caused changes by reducing Sebrae's activities throughout the national territory, with an immediate impact on the agglomeration of Jaú (Table 3 and Table 1). This event could have destabilized established practices or triggered an abrupt change in the institutional arrangement that might have modified the productive and economic activity of this locality, as well as the collapsing of the institution or the replacement by another, as suggested by the punctuated equilibrium model (True, Jones, & Baumgartner, 1999).

What was observed was that these external events had an impact, but did not alter the governance structure or redirect the institution towards new purposes, transforming its

functions and the roles they played, as advocated by the type of *drift* change (Hacker *et al.*, 2015; Mahoney & Thelen, 2010). As indicated by Thelen (2003), some institutional arrangements are more resistant to change, even in the face of external shocks, because an important source of institutional change is the misalignment between existing arrangements, interests, and needs of the actors that constitute these same arrangements (Thornton, Ocasio, & Lounsbury, 2012).

Another issue refers to the very formation of the agglomerate, *focused on production, it was not a model focused on the market, on the customer... otherwise, it would have prospered* (E03). One of the explanations for the adoption of this model may be related to the way Jaú's production was constituted and expanded, generally obeying the rule that the new footwear manufacturers *are former employees of companies that left and opened new businesses and did not appropriate their role as entrepreneurs, always referring to themselves as shoemakers* (E06). Empirical studies reinforce the role of the historical trajectory as a starting point for the study of institutional change and how institutions evolve and reproduce the model already established by actors and groups (Streeck, 2009; Maggetti, 2014, Capoccia & Kelemen, 2007).

Thus, the identification of the type of change in layers points to a trend of continuity and maintenance of the institutional structure. Even after the findings of the research, some interviewees mentioned difficulties in making changes, especially those imposed by the market, particularly the valorization of local production, ecological appeal and the rescue of the identity of the cluster.

As pointed out by Coraiola *et al.*, (2015) and Mahoney and Thelen (2010), political and institutional issues can give rise to some kind of agent that triggers change. For this type of change, agents must have the resources to sponsor and make changes outside of existing policies (Rocco & Thurston, 2014). This seems to have been the case with Sebrae who aimed to create viable alternatives and changes to the original institution by making available financial, material, or intellectual resources that would persuade the actors that the change in the institution would be necessary.

Regarding Sebrae specifically, *the manufacturers saw it as a financial entity and not as a professional training entity* (E02). For E06, one of the main failures of Sebrae was that *we should not do it for them (entrepreneurs), we (Sebrae) can even diagnose, but they are the ones who have to do it, their way, and this I think was one of the factors that also "hindered" the maturation process*. Layered change is marked by initial institutional ambiguity, with changing rules that allow groups to reinterpret or reshape institutions according to their preferences, especially when one institution directly challenges another parallel institution (Rocco & Thurston, 2014).

For Coccia (2018), in the process of institutional change, each individual calculates the expected costs and benefits of this change. The *layering* category of change assumes that some actors will try to maintain the institution even if the results achieved are not those initially predicted, as this meets their interests and objectives to keep it unchanged (Van Der Heijden, 2014).

In the case studied, there was no environmental disruption or emergence of a new institutional structure that could alter socioeconomic or geographical dimensions, exclude social actors, or change economic activity. The agglomeration continues to produce footwear, despite the reported episodes (Sindicalçados, 2022; Abicalçados, 2022). What was observed was how the presence and actions of an important actor such as Sebrae generated positive externalities when there were financial resources available and how the reduction of its action was perceived by the locality (Favoni, Paulillo, & Sacomano Neto, 2019).

Layering change occurs as a product of the interaction among actors, ideas, and institutions (Béland; Powell, 2016). As Schickler (2001) points out, the layering occurs when one institution directly challenges another parallel institution, thus eroding support for the latter. Consequently, the studied institutional structure induced change through the interaction among institutions, in this case, one of them being Sebrae. The change agents (Sebrae, for example) could make modest changes, and the result of the changes was an institution similar to the initial one (Rocco & Thurston, 2014).

5 Final considerations

This study analyzed the type of institutional change in the productive agglomeration of footwear in Jaú between the years 2001 and 2019. The results pointed to the type of change called *layering*, according to the typology proposed by Mahoney and Thelen (2010), because the institutional elements identified in the research had an impact on agglomeration, but did not modify its structure or its political composition or economic characteristic. The study shows the role of institutions to explain economic results (North, 1990; Fligstein & Goldstein, 2022), regional development (Beckert, 2010; Benner, 2017; Jacometti, Gonçalves, & Castro, 2014) and institutional change (Gerschewski, 2021; Greenwood et al., 2002; Thelen, 2003).

The conclusion of this work as an institutional change in layers points to a trend of continuity and maintenance of the same procedures and models of production, management, and techniques established before the events reported in the work. They are seen as sufficient to achieve the results desired by the actors (companies), even after the organizational and institutional performance of actors such as Sebrae, as also indicated in the research results of Streeck and Thelen (2005).

It should be noted that the present research made a methodological choice (case study) due to access to the object of study and interviewees. Thus, future studies could investigate institutional changes in other locations, especially those formed by micro and small enterprises (MSEs), as they are influential actors in the economic and social development of various regions of Brazil (Saraiva et al., 2020). In addition, we opted for a delimitation of the group of interviewees, focusing on those social actors directly involved with the actions and events reported.

Further studies are needed to analyze the internal dynamics and aspects that represent obstacles or institutional dispositions for more substantial changes, especially the norms and beliefs that constitute informal institutions and how they influence the behaviors and dispositions of individuals, such as entrepreneurs in the formation or maintenance of productive agglomerations (Coccia, 2018; Thornton, Ocasio, & Lounsbury, 2012).

As a suggestion for the actors involved, the literature and the results indicated that regional economic development is linked to the dynamics of the structure and relations between the actors and the institutions that can create ways to adapt to the new economic context, either through the introduction of new technologies, integration between social and economic forces and/or in the relations of cooperation and trust between the actors.

Finally, a practical implication of the present work consists of discussing how external events or factors impact the institutional environment with economic and productive repercussions, especially in productive agglomerations formed by micro and small businesses. It is believed that this is a theme that continually needs to be explored in institutional studies.

References

- Abicalçados - Associação Brasileira das Indústrias de Calçados (2022). *Relatório setorial: indústria de calçados*. Disponível em <http://www.abicalcados.com.br/publicacoes/relatorio-setorial>
- Araujo Aguiar, T. C; Moreira, V. F. (2022). Papeis dos atores institucionais no ecossistema de negócios tecnológicos de impacto social: evidências de Campina Grande - PB. *Gestão & Regionalidade*, 38(113). Recuperado de https://seer.uscs.edu.br/index.php/revista_gestao/article/view/7005
- Barbosa Leite, D., Marcelo Faustino da Silva, C., Tomaz Caires, R., Stefani Teixeira, C., & Augusto Biz, A. (2023). Parques de ciência e tecnologia como núcleo da quádrupla hélice: uma proposta para o desenvolvimento regional de Mato Grosso - Brasil: a proposal for regional development of Mato Grosso - Brazil. *Gestão & Regionalidade*, 39(116). <https://doi.org/10.13037/gr.vol39n116.7718>
- Beckert, J. (2010). How Do Fields Change? The Interrelations of Institutions, Networks, and Cognition in the Dynamics of Markets. *Organization Studies*, 31(5), 605-627. doi:10.1177/0170840610372184
- Béland, D., & Powell, M. (2016) Continuity and Change in Social Policy. *Social Policy & Administration*, 50: 129– 147. doi: 10.1111/spol.12207.
- Benner, M. (2017). From Clusters to Smart Specialization: Tourism in Institution-Sensitive Regional Development Policies. *Economies*, 5(26). doi: 10.3390/economies5030026
- Capoccia, G., & Kelemen, D. (2007). The Study of Critical Junctures: theory, narrative, and counterfactuals in historical institutionalism. *World Politics*, 59(3), 341-369. doi:10.1017/S0043887100020852
- Casella, G., & Berger, R. L. *Inferência Estatística*. São Paulo: Cengage Learning, 588 p. 2010
- Coccia M. (2018). An Introduction to the Theories of Institutional Change. *Journal of Economics Library*, 5(4), 337-344. doi10.1453/jel.v5i4.1788
- Coraiola, D. M., Jacometti, M., Baratter, M. A., & Gonçalves, S. A. (2015). Conciliando agência e contexto na dinâmica da mudança institucional. *Cadernos EBAPE.BR [online]*. 13(4), 701-726. doi:10.1590/1679-39518879
- Deephouse, D. L., & Suchman, M. (2008). Legitimacy in Organizational Institutionalism. In Greenwood, R. et al., *The Sage Handbook of Organizational Institutionalism*, 49-77, Thousand Oaks: Sage. doi:10.4135/9781849200387.n2
- Dimaggio, P. J., & Powell, W. W. (2007). Jaula de ferro revisitada: isomorfismo institucional e racionalidade coletiva nos campos organizacionais. In Caldas, M. P.; Bertero, C. O. (Coord.). *Teoria das organizações*. São Paulo. Atlas.



- Favoni, C., Paulillo, L. F. O., & Sacomano Neto, M. (2019). Metamorphoses in Jaú's women's footwear product cluster: from dense to loose-knit network. *Gestão & Produção*, 26(4), e5088. <https://doi.org/10.1590/0104-530X5088-19>
- Fligstein, N. (2013). Understanding stability and change in fields. *Research in Organizational Behavior*, 33, 39-51. doi:10.1016/j.riob.2013.10.005
- Fligstein, N., & Goldstein, A. (2022). The Legacy of Shareholder Value Capitalism. *Annual Review Sociology*. 48. doi:10.1146/annurev-soc-030420-120827
- Gerschewski, J. (2021). Explanations of Institutional Change: Reflecting on a "Missing Diagonal". *American Political Science Review*, 115(1), 218-233. doi:10.1017/S0003055420000751
- Glückler, J., & Lenz, R. (2016). How institutions moderate the effectiveness of regional policy: A framework and research agenda. *Investigaciones Regionales. Journal of Regional Research*, 36, 255-277. Disponível em <https://econpapers.repec.org/article/risinvreg/0335.htm>
- Greenwood, R., Oliver, C., Lawrence, T. B., & Meyer, R. E. (2017). *The SAGE Handbook of Organizational Institutionalism*. SAGE Publications Ltd, <https://dx.doi.org/10.4135/9781526415066>
- Hacker, J. S., Pierson, P., & Thelen, K. (2015). Drift and conversion: hidden faces of institutional change. In J. Mahoney, & K. Thelen (Eds.), *Advances in comparative-historical analysis* (pp. 180-208). New York, NY: Cambridge University Press.
- Hall, P. A. (2010). Historical Institutionalism in Rationalist and Sociological Perspective. In: *Explaining Institutional Change: Ambiguity, Agency, and Power*. 204-223, New York, Cambridge University Press.
- Hancock, D. R., Algozzine, B., & Lim, J. H. (2021). *Doing Case Study Research: A Practical Guide for Beginning Researchers*. Teachers College Press, 128p.
- Hinrichs, K., & Kangas, O. (2003). When Is a Change Big Enough to Be a System Shift? Small System-shifting Changes in German and Finnish Pension Policies. *Social Policy & Administration*, 37, 573-591. doi: 10.1111/1467-9515.00359
- Jacometti, M., Gonçalves, S. A., & Castro, M. (2014). Institutional work e conhecimento em redes interorganizacionais: uma proposta para investigar APLs. *Revista de Administração do Mackenzie*, São Paulo, 15(6), 17-47. doi:10.1590/1678-69712014/administracao.v15n6p17-47
- Jensen, C. (2009). Policy Punctuations in Mature Welfare States. *Journal of Public Policy*, 29(3), 287-303. Disponível em <http://www.jstor.org/stable/40542351>



- Kingston, C., & Caballero, G. (2009). Comparing theories of institutional change. *Journal of Institutional Economics*, 5(2), 151-180. doi:10.1017/S1744137409001283
- Kluttz, D.N., & Fligstein, N. (2016). Varieties of Sociological Field Theory. In: Abrutyn, S. (eds) *Handbook of Contemporary Sociological Theory. Handbooks of Sociology and Social Research*. Springer, Cham. doi.org/10.1007/978-3-319-32250-6_10
- Lauretto, M.S., Nakano, F., Pereira, C. A. B., Stern, J. M. (2012). Intentional Sampling by Goal Optimization with Decoupling by Stochastic Perturbation. *In XI Brazilian Meeting on Bayesian Statistics*, 1490, 189-201.
- Maggetti M. (2014). Institutional change and the evolution of the regulatory state: evidence from the Swiss case. *International Review of Administrative Sciences*, 80(2), 276-297. doi:10.1177/0020852313514517
- Mahoney, J., & Thelen, K. (2010). A theory of gradual institutional change. In: Mahoney, J.; Thelen, K (Eds.). *Explaining institutional change – ambiguity, agency and power*. New York: Cambridge University Press, 1-37.
- Micelotta, E., Lounsbury, M., & Greenwood, R. (2017). Pathways of Institutional Change: An Integrative Review and Research Agenda. *Journal of Management*, 43(6), 1885–1910. doi:10.1177/0149206317699522
- MPT - Ministério Público do Trabalho (2015). *Sebrae-SP aceita acordo e vai corrigir contratações irregulares*, Sala de Imprensa. Disponível em http://portal.mpt.mp.br/wps/portal/portal_mpt/mpt/sala-imprensa
- Morselli, A. (2021). Growth and institutional changes: a historical evolution. *Brazilian Journal of Political Economy*, 41(2), 292-313. doi:10.1590/0101-31572021-3133
- Mosley, L. (2013). *Interview Research in Political Science*. London, UK: Cornell University Press. Disponível em <https://www.jstor.org/stable/10.7591/j.ctt1xx5wg>
- North, D. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press.
- Powell, W. W., & Colyvas, J. (2008). A. Microfoundations of Institutional Theory. In Greenwood, R., Oliver, C., Sahlin, K.; Suddaby, R. *The Sage Handbook of Organizational Institutionalism*, 276-298. Thousand Oaks: Sage.
- Rais - Relação Anual de Informações Sociais (2022). *Estatísticas*. Disponível em <http://acesso.mte.gov.br/portal-pdet/o-pdet/portifolio-de-produtos/bases-de-dados.htm>
- Ralio, V. R. Z., & Donadone, J. C. (2019). The forms of intermediation in the space of Brazilian micro and small-sized enterprises: SEBRAE, from foundation to performance in the 21st century. *Gestão & Produção [online]*, 26(4). doi:10.1590/0104-530X4219-19
- Richardson, R. J. (2017). *Pesquisa social: métodos e técnicas*. São



Paulo: Atlas, p. 424.

Rocco, P., & Thurston, C. (2014). From metaphors to measures: Observable indicators of gradual institutional change. *Journal of Public Policy*, 34(1), 35-62. doi:10.1017/S0143814X13000305

Samadi, A.H., & Alipourian, M. (2021). Institutions and Institutional Change: Concepts and Theories. In: Faghih & Samadi, (eds) *Dynamics of Institutional Change in Emerging Market Economies. Contributions to Economics*. Springer, doi:10.1007/978-3-030-61342-6_4

Saraiva, A. F. S., Andrade, G. N. S. Oliveira, N. M. Luz, R. A. da. (2020). Alocação espacial e associações geográficas das micro e pequenas empresas nos setores produtivos da microrregião de Imperatriz-MA. *Gestão & Regionalidade*, 36(107). <https://doi.org/10.13037/gr.vol36n107.5569>

Schickler, E. (2001). *Disjointed Pluralism: Institutional Innovation and the Development of the U.S. Congress*. Princeton University Press. Disponível em: <http://www.jstor.org/stable/j.ctt7rr34>

Scott, W. R. (2001). *Institutions and organizations*. 2. ed. Thousand Oaks: Sage.

Seade – Fundação Sistema Estadual de Análise de dados. (2022). *IMP – Informações dos Municípios Paulistas*. Disponível em: < <http://www.imp.seade.gov.br/frontend/#/>>.

Sde - Secretaria de Desenvolvimento Econômico. (2022). *Arranjos Produtivos Locais (APL)*. Disponível em <https://www.desenvolvimentoeconomico.sp.gov.br/programas/arranjos-produtivos-locais-apls/>

Seeleib-Kaiser, M. (2008). Welfare State Transformations in Comparative Perspective: Shifting Boundaries of ‘Public’ and ‘Private’ Social Policy? In: Seeleib-Kaiser, M. (eds) *Welfare State Transformations*. Palgrave Macmillan, London. https://doi.org/10.1057/9780230227392_1

Shapiro, I. (2012). Problems, Methods, and Theories in the Study of Politics, Or What's Wrong with Political Science and What to Do About It. *Political Theory*, 30(4), 596-619. Disponível em <https://www.jstor.org/stable/3072623>

Sindicalçados - Sindicato da Indústria de Calçados de Jaú. (2022). *Quem somos*. Disponível em www.sindicaljau.com.br

Streeck, W. (2009). *Institutions in History: Bringing Capitalism Back in*. The Oxford Handbook of Comparative Institutional Analysis, Discussion Paper No. 09/8, Disponível em <https://ssrn.com/abstract=1852543>

Streeck, W., & Thelen, K. A. (2005). *Beyond continuity: institutional change in advanced political economies*. Oxford, UK: Oxford University Press



- Tang, S. (2011). *A General Theory of Institutional Change*. London: Routledge.
- Tavares, B., Leite M. D., & Carvalho, C. C. (2011). Evidências de indução e mimetismo nos arranjos produtivos locais pela ação institucional do Sebrae. *Administração Pública e Gestão Social*, 2(4), 339–361. doi:10.21118/apgs.v2i4.4032.
- Thelen, K. (2003). How Institutionalism Evolves: Insights from Comparative Historical Analysis. In: Mahoney, J., & Rueschemeyer J. *Comparative Historical Analysis in the Social Sciences*. New York: Cambridge University Press, 208-240.
- Thelen, K. (2009). Institutional change in advanced political economies: First annual lecture of the bjir. *British Journal of Industrial Relations*, 47(3), 471- 498. doi:10.1111/j.1467-8543.2009.00746.x
- Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective: a new approach to culture, structure, and process*. Oxford University Press.
- Tolbert, P., David, R., & Sine, W. (2011). Studying choice and change: the intersection of institutional theory and entrepreneurship research. *Organization Science*, 22(5), 1332-1344.
- True, J. L., Jones, B. D., & Baumgartner, F. R. (1999). Punctuated-equilibrium theory. In P.A. Sabatier (Ed.), *Theories of the Policy Process*. Westview Press, 97-115.
- Van der Heijden, J. (2014). Through Thelen's lens: Layering, conversion, drift, displacement, and exhaustion in the development of Dutch construction regulation'. *CEGNet Working Paper*, No. 46, Regulatory Institutions Network.
- Venturini, A. C. (2021). Affirmative action for Brazilian graduate programs: patterns of institutional change. *Revista de Administração Pública [online]*. 55(6), 1250-1270. doi:10.1590/0034-761220200631
- Yang, Z., & Su, C. (2014). Institutional theory in business marketing: Conceptual framework and future directions. *Industrial Marketing Management*, 43, 721-725. doi:10.1016/j.indmarman.2014.04.001

Appendix 1 - Questions addressed in the survey

- 1) When and how did the cluster of shoe companies in Jaú form?
- 2) What historical facts were decisive for the cluster?
- 3) What projects or public policies were most important for the shoe producers in Jaú?
- 4) In your opinion, which entities were most decisive for the cluster in recent years?
- 5) Was there any change in the organization and/or coordination of the cluster and who did it benefit?
- 6) Was there any technological change or innovation that changed the way companies in Jaú work? Which? When?
- 7) Did the footwear industries in Jaú follow a business model? Which? Why?



- 8) Was there and is there still some kind of cooperation between the footwear industries and entities?
- 9) At some point did the footwear industry in Jaú have its own identity (brand, quality, national projection)?
- 10) What is the value of the footwear industries for the municipality of Jaú? And for the region?
- 11) Were there practices by entities or public policies that sought to increase the participation of companies in improving and managing the cluster?
- 12) How do you identify the positioning of the actors in favor and against the participation of the entities in the organization of the shoe agglomeration of Jaú?
- 13) Is there or was there articulation between the actors (entities and companies)?
- 14) In your opinion, what are the biggest challenges and obstacles for the footwear industry in Jaú? Why?

ⁱ Doutor em Engenharia de Produção pela Universidade Federal de São Carlos - SP. Mestre em Economia pela Universidade Estadual de Maringá - PR. Bacharel em Economia pela Universidade Estadual de Londrina - PR. Atualmente é professor e pesquisador RJI das Faculdades de Tecnologia de Jahu e Bauru/SP - Brasil.

ⁱⁱ Doutor em Engenharia de Produção pela Universidade Federal de São Carlos (UFSCar). Bacharel em Administração de Empresas pela Pontifícia Universidade Católica (PUC) e mestre em Engenharia de Produção pela Universidade de São Paulo (USP). Pós-doutorado em Sociologia Econômica pela Universidade da Califórnia (Berkeley- USA) Atualmente é Professor e pesquisador da Universidade Federal de São Carlos - Departamento de Engenharia de Produção e coordenador do Programa de Pós-Graduação em Gestão de Organizações e Sistemas Públicos - UFSCar - São Carlos - SP – Brasil

ⁱⁱⁱ Titulação: Doutor em Economia pelo Instituto de Economia da UNICAMP - Campinas - SP. Mestre em Engenharia de Produção pela Universidade Federal de São Carlos - SP. Bacharel em Economia pela Universidade Estadual Paulista - Araraquara - SP. Atualmente é Professor Titular do Departamento de Engenharia de Produção da Universidade Federal de São Carlos e Diretor do Centro de Ciências Exatas e de Tecnologia da Universidade Federal de São Carlos - SP.

^{iv} Doutorando em Engenharia de Produção da Universidade Federal de São Carlos - SP em parceria com Doctorado en Ingeniería de Organización da Universidad Politécnica de Madrid - Espanha. Bacharel em Engenharia de Produção Mecânica pela Escola de Engenharia de São Carlos - SP (EESC/USP) (2011) e Mestrado em Engenharia de Produção - USP - São Carlos - SP. Atualmente é professor afastado da Universidade Federal de Mato Grosso do Sul.

