



LUND UNIVERSITY
School of Economics and Management

A Signalling Demonstrations Model

Application to the Chilean Case

Alejandra Paz Rivera Vicencio

August 2020

Master's Thesis I

Master's Programme in Economics

Department of Economics

Supervisor: Erik Mohlin

Abstract

This thesis studies demonstrations in a game theoretic framework. In the model designed, demonstrations are explored as signals from different types of agents who pursue a redistribution in their society. The types of agents depend on their likelihood to achieve a “large” demonstration and therefore a franchise extension. The ones in power cannot distinguish between the types of agents, thus it is an incomplete information game. An empirically observed equilibrium is proven, where all the types choose to demonstrate, and only large demonstration produces a franchise extension. The specific equilibrium is then applied to real life situation with a major focus on the demonstrations that took place in Chile 2019.

Keywords: Demonstration, Signalling, Chile, Game Theory, Protest.

Acknowledgements

I would like to thank my supervisor Erik Mohlin for his time, guidance and advice over these last months. In addition, I would like to thank friends and family for their constant and endless support.

Table of Contents

1. Introduction	1
2. The model: signalling demonstrations.....	2
3. Results	5
4. Discussion of the theoretical model	9
4.1. Discussion of modelling assumptions.....	9
4.2. Other equilibria	10
5. Application of the model	12
5.1. Application to Chile.....	12
5.2. Further applications	14
6. Conclusions	16
7. References	17

List of Figures

Figure 1:Extensive form of the Signalling Game.....	3
Figure 2:Pooling Equilibrium with Franchise Extension only when Large	
Demonstration	5

1. Introduction

The objective of this thesis is to understand demonstrations, focusing on its role as a signal emitted by agents that cannot be distinguished. For which a game theoretic model is designed. The other objective of this thesis is to prove and apply a specific equilibrium of the model in which the people decide to always demonstrate and the ones in power only extend the franchise when they observe a relatively large demonstration. This particular pooling equilibrium can be empirically observed in the series of demonstrations that took place in Chile in 2019 and it is studied in comparison with other great demonstrations of the Latin American country the last decade.

In a year like 2019, which *The New Yorker* considered a year rocked by a tsunami of protests across all continents, the understanding of the functioning of extensions of the franchise can be of great interest (*The New Yorker*, 2019). The game theoretical approach can bring a new perspective to the table.

Acemoglu and Robinson (2000) design a model of demonstrations in an autocratic regime, portraying the extensions of the franchise in Europe during the XIX century. In which, voluntarily, autocratic regimes decided to extend their franchise and turn into a democracy due to the fear of a revolution and the loss or destruction of their capital.

Wouters and Walgrave (2017) develop a study on the characteristics of demonstrations that influence public representatives. They due to term a data analysis on how numbers or the worthiness of demonstrators influence when emitting signals of social discontentment, aside from the game theoretic framework.

Barberà and Jackson (2019) examine aspects on learning between protesters before revolts in order to learn about the likelihood of success. They also study contagion effects between types of demonstrators and regions.

In Section 2 the model is theoretically described, followed by an equilibrium proof in Section 3. In Section 4 some assumptions and other equilibria are discussed. In Section 5 the application to the Chilean case is explained together with further applications. Finally, conclusion are included in Section 6.

2. The Model: Signalling Demonstrations

The society consists on a great number of individuals, who belong to either the Elite (E) or the People (P). The Elite, who are a smaller proportion of the individuals, is in power and does not implement any (or very limited) redistribution. Their interaction is modelled as an extensive-form game of incomplete information. Each group, the Elite and the People, is treated as a unitary actor, or player. This means that collective action problems within these groups are disregarded. This can be motivated by assuming that the groups have already been organised. The Elite may be organised through their domination of the government and the People may be organised in a popular movement for reform. The People can be of two types: Strong People (PS) or Weak People (PW). The type of the People is picked by nature at the beginning of the game and it is unknown by the Elite but known by the People.

On the one hand, the main goal of the People is to achieve a larger degree of redistribution, through the democratisation of the state, either by the Elite voluntarily relinquishing power or by revolution. On the other hand, the Elite want to keep their power or at least avoid a revolution (in which case they may lose all their capital).

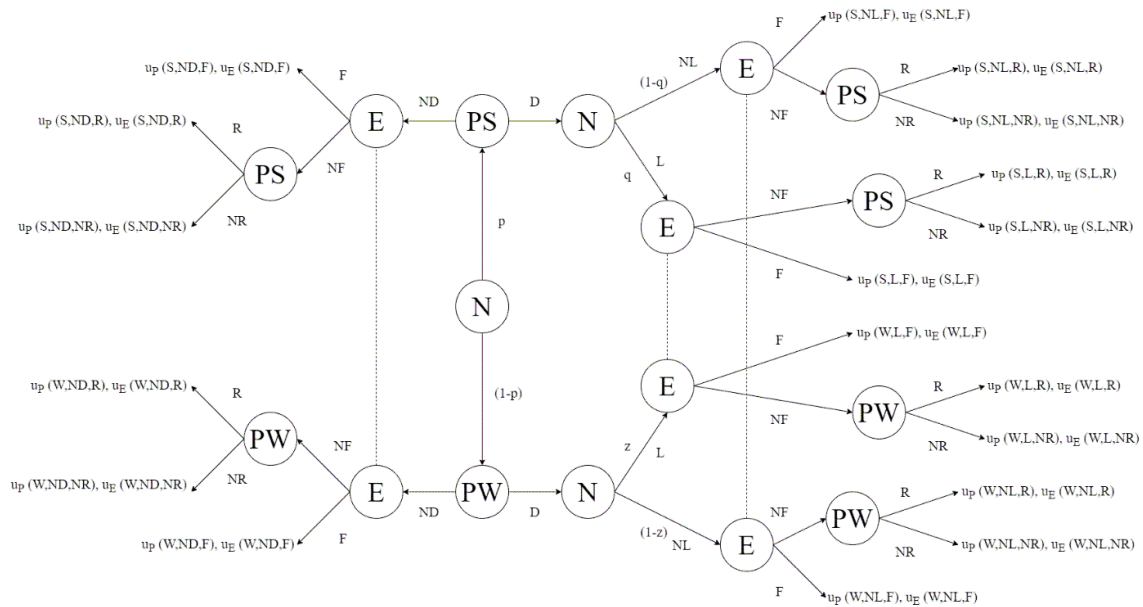
The Strong People have a higher probability of being successful in case a revolution starts. The People can choose to demonstrate before deciding whether to start a revolution, and this demonstration can be of two different magnitudes.

The idea of the two types of People agents can be thought as having an organised movement. If the People are well-organised, the demonstrations can be more effective and the achievements through protests or other kinds of showing discontentment are also higher. The revolution by a well-organised movement has also a higher probability to be successful, a disorganised protest is easier to dissolve. However, nature plays an important role in determining the magnitude of the demonstration, it can be thought as randomness.

The game starts with nature (N) who picks the type of Strong People with probability p and the Weak with probability $(1 - p)$. Afterwards regardless of the type, the People can choose to organise a demonstration (D) or not (ND). If the demonstration is organised, nature decides whether the demonstration is large (L) or not (NL). The probability of large

demonstration for the Strong People is q , while for the Weak People it is z . It is important to mention that $q > z$. After observing the demonstration-choice of the People and observing the size of the demonstration in case there was a demonstration, the Elite decide whether to extend the franchise or not to extend it and try to keep the power. If the Elite decide to extend the franchise and hence transform their state into a democracy, the game ends. The extension of the franchise cannot be rescinded. If they choose to keep the autocratic regime, then the People can decide whether to start a revolution (R), or they can surrender (NR for No Revolution). In case a revolution is started by the Weak People, they are always defeated. In case a revolution initiated by the Strong People it is always successful.

Figure 1: Extensive form of the Signalling Game



In Figure 1, the game previously explained is represented in a tree form. Where D stands for demonstration and ND for not demonstration. In the Elite's decision node, F is the strategy of franchise extension and NF means the elite decides not to extend the franchise. In the last node, the People have to choose between R , starting a revolution, or NR , which is surrendering or giving up on the revolution. The Elite do not know who they are playing against. They only observe whether there was a demonstration and if there was, they know if it was powerful or not, but never the type of the People. This fact is highlighted in Figure 1 by the dot lines between the nodes, indicating the three different information sets of the elite.

In the terminal nodes the payoffs of the players are represented by the utility functions $(u_P; u_E)$. The utility $u_i(\theta, \delta, \rho)$ to player $i \in \{P, E\}$ is a function of the type of the People $\theta \in \{W, S\}$, the kind of demonstration $\delta \in \{ND, L, NL\}$, and the regime or revolution parameter $\rho \in \{F, R, NR\}$.

The equilibrium that I pursue to explain is the one which makes both types of the People demonstrate and the Elite to extend the franchise only when a large demonstration takes place. The Strong People would attempt to start a revolution when the franchise is not extended, while the Weak People would surrender.

Hence, about the payoffs:

The main goal of the People is to achieve a degree of redistribution, which translates to achieving a democratic regime. Thus, franchise extension or revolution grants the Strong People the same payoff, since their revolution is always successful.

$$u_P(S, L, R) = u_P(S, NL, R) = u_P(S, ND, R) = u_P(S, \cdot, F) > u_P(S, \cdot, NR)$$

NR is a dominant move for the Weak People because their revolutions are always unsuccessful given their organisation problems. The extension of the franchise is the best possible outcome for the Weak People.

$$u_P(W, \cdot, F) > u_P(W, \cdot, NR) > u_P(W, \cdot, R)$$

Revolutions are the worst payoff for the Elite since they lose their power and some amount of capital through it. Thus, the best scenario for them is to play against the Weak People and not extend the franchise so they can keep on being in power.

$$u_E(W, \cdot, NR) = u_E(S, \cdot, NR) = (W, \cdot, R) > u_E(S, \cdot, F) = u_E(W, \cdot, F) > u_E(S, \cdot, R)$$

3. Results

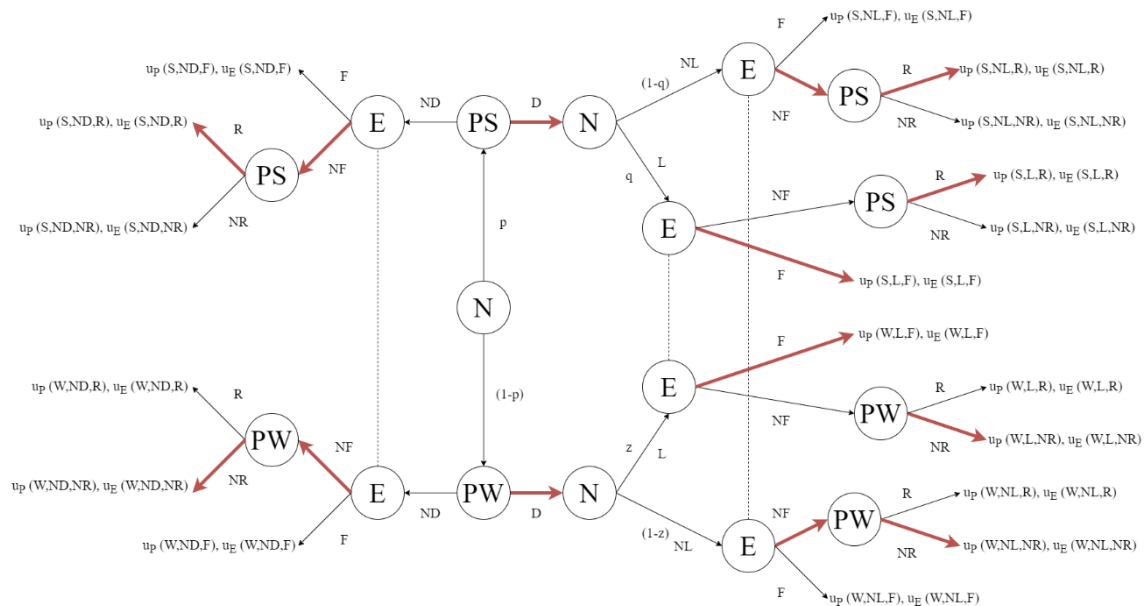
Franchise extension only with a large demonstration

Let us find a weak Perfect Bayesian Equilibrium (wPBE) in pure strategies for this Signalling Demonstrations Model. A wPBE is a profile of strategies where players maximise their expected payoff given their system of beliefs and other players strategies, and beliefs are derived from Bayes' rule whenever possible.

Proposition

There exists a weak Perfect Bayesian Equilibrium in which both types of player demonstrate, and the Elite only extends the franchise only after observing a large demonstration. The Strong People would start a revolution if the franchise is not extended, but the Weak would surrender (play *NR*) when it is not extended. In Figure 2, the pursued pooling equilibrium is shown.

Figure 2: Pooling Equilibrium with Franchise Extension only when Large Demonstration



Proof

For the People to be best responding by playing D , the expected utility of the demonstration must be greater or equal to the expected utility of no demonstration:

$$E(D) \geq E(ND)$$

For the Strong People, the expected payoff of D and ND is equal. If the Elite decide to extend the franchise, they obtain the redistribution they pursued. On the other hand, if the Elite decides not to extend the franchise, they obtain the redistribution through a revolution. Thus, the Strong People are indifferent between demonstrating and not demonstrating, because they will reach the same degree of redistribution. Let us assume that, since the Strong People are indifferent, they play D .

The Weak People are not naturally indifferent between demonstrating or not, because their organisation costs are higher and starting a revolution is always unsuccessful for them. If the Elite decide to extend the franchise when they observe no demonstration, the Weak People play ND . If the Elite decide to play NF , when observing ND then the decision of the Weak People depends on what the Elite does when observing any of the two types of demonstrations:

- If the Elite decide to never extend the franchise, then the Weak People are indifferent between D and ND .
- If the Elite decide to always extend the franchise when there was a demonstration, regardless of the type, the Weak People always play D .
- If the Elite decide to extend the franchise only after observing one of the types of demonstration, the Weak People play D , because they can reach the franchise extension with some positive probability.

The Elite who are in power must have a plan of action for the large demonstration, the minor or small demonstration and for when there is no demonstration. Consider the action set (F, NF, NF) where the first letter is the action followed when the Elite observe a large demonstration, the second letter is the one followed when the demonstration is small and the third stand for the one when they observe the People played ND .

For the Elite to extend the franchise when there is a large demonstration, the expected utility of F has to be greater or equal than the expected utility of NF .

$$E(F) \geq E(NF)$$

Let μ_L be the belief on the probability of the People being Strong when there is a large demonstration: $\mu_L = P(PS|L)$.

$$E(F) = u_E(\cdot, L, F)$$

$$E(NF) = \mu_L u_E(S, L, R) + (1 - \mu_L) u_E(W, L, NR)$$

$$u_E(\cdot, L, F) \geq \mu_L u_E(S, L, R) + (1 - \mu_L) u_E(W, L, NR)$$

$$\mu_L \leq \frac{u_E(\cdot, L, F) - u_E(W, L, NR)}{u_E(S, L, R) - u_E(W, L, NR)}$$

Where:

$$|u_E(\cdot, L, F) - u_E(W, L, NR)| < |u_E(S, L, R) - u_E(W, L, NR)|, \text{ so } \mu_L < 1.$$

In case of a small demonstration, the Elite should not extend the franchise, therefore:

$$E(NF) \geq E(F)$$

Let μ_{NL} be the probability of the People being Strong when the Elite observe a minor demonstration. $\mu_{NL} = P(PS|NL)$

$$E(NF) = \mu_{NL} u_E(S, NL, R) + (1 - \mu_{NL}) u_E(W, NL, NR)$$

$$E(F) = u_E(\cdot, NL, F)$$

$$\mu_{NL} u_E(S, NL, R) + (1 - \mu_{NL}) u_E(W, NL, NR) \geq u_E(\cdot, NL, F)$$

$$\mu_{NL} \geq \frac{u_E(\cdot, NL, F) - u_E(W, NL, NR)}{u_E(S, NL, R) - u_E(W, NL, NR)}$$

Where:

$$|u_E(\cdot, NL, F) - u_E(W, NL, NR)| < |u_E(S, NL, R) - u_E(W, NL, NR)|, \text{ so } \mu_{NL} < 1.$$

In the last scenario when there is no demonstration by the People, the Elite should not extend the franchise either. So as in the previous case, the expected payoff of not extending the franchise should be greater or equal as the payoff obtained by turning into a democracy.

$$E(NF) \geq E(F)$$

If the Elite assume that the People are Strong after observing ND , then they play franchise extension. If the Elite assume that the People are Weak when they observe no demonstration, the Elite play NF . Therefore, the Elite must believe that only the Weak play no demonstration. Let μ_{ND} be the belief that the People are Strong when ND was played, $\mu_{ND} = P(PS|ND)$. Since this is an off path move, any belief is possible in a wPBE, thus $\mu_{ND} = 0$ is possible.

Therefore, $\{(D, R); (D, NR); (F, NF, NF)\}$ is a pooling equilibrium with:

$$\mu_L \leq \frac{u_E(., L, F) - u_E(W, L, NR)}{u_E(S, L, R) - u_E(W, L, NR)};$$

$$\mu_{NL} \geq \frac{u_E(., NL, F) - u_E(W, NL, NR)}{u_E(S, NL, R) - u_E(W, NL, NR)};$$

$$\mu_{ND} = 0. \blacksquare$$

4. Discussion of the Theoretical Model

4.1. Discussion of Modelling Assumptions

One of the strong assumptions of the model is the zero probability of success of the Weak. The Weak People could have a positive probability of success in case of revolution. Thus, the payoff of a successful revolution would be equal to a franchise extension (as it is with the Strong People). However, the probability of success of the Weak must be lower than the Strong. With this positive probability, if it depends on the type of demonstration, then the model does not show a perfect signalling game, since there are other incentives for the Weak to decide to demonstrate. If the probability of success of the revolution is independent of the previous actions of the game, then the model is more complicated, but the basic outlines of the game would be the same.

Another strong assumption is to treat demonstrations as pure signals, which do not affect the next moves of the game. The game could be thought as an infinitely repeated game if the franchise is not extended, instead from the one-shot game. Therefore, in every period the probability of success would increase for both players. Hence, the Elite might not extend the franchise during the first shots of the game but do it when they consider the probability of success of a certain type is high enough.

On the other hand, the type of demonstration δ , could influence the probability of success. Logically a large demonstration should increase the probabilities of revolution success. In the case of the Weak People it could indicate that they could overcome their organisation problems. No demonstration and small demonstration should have lower probabilities of success. Then, both players have incentives to demonstrate, aside from signalling because the successful revolution brings them the same payoff as the franchise extension, obtaining redistribution in the society. Then the Elite has simultaneously more reasons to extend the franchise when observing a large demonstration.

4.2. Other Equilibria

Other weak Perfect Bayesian Equilibria are possible with the Signalling Demonstrations Model in pure strategies. This thesis is focused in just equilibrium which was considered empirically relevant. Some of the other possible equilibria are discussed.

Pooling wPBE both types of People do not demonstrate

- The Strong People are indifferent, so they can play ND .
- The Weak People do not demonstrate because the Elite does not extend the franchise when observing L neither NL .
- The Elite cannot distinguish between the types of People. To have an equilibrium they should have beliefs that the only ones that demonstrate are the Weak People. This is an off-path scenario, so any beliefs are possible. If the Elite believe that only the Weak demonstrate, then they should believe that the Strong always play ND . Thus, when they observe no demonstration, the Elite extends the franchise.

Therefore, $\{(ND, R); (ND, NR); (NF, NF, F)\}$ is a wPBE with:

$$\mu_L = 0; \mu_{NL} = 0; \mu_{ND} \leq \frac{u_E(.,ND,F) - u_E(W,ND,NR)}{u_E(S,ND,R) - u_E(W,ND,NR)}$$

Separating wPBE where only Strong people demonstrate

- The Strong are indifferent between demonstrating or not, let us say they play D .
- The Weak do not demonstrate because the Elite does not extend the franchise when observing any type of demonstrations, so there are no incentives for the Weak to play D .
- The Elite has a system of beliefs where they are indifferent between extending the franchise or trying to keep the power in every scenario. Let us say, since they are indifferent, that the Elite only chooses to play NF .

Therefore, $\{(D, R); (ND, NR); (NF, NF, NF)\}$ is a wPBE with:

$$\mu_L = \frac{u_E(.,L,F) - u_E(W,L,NR)}{u_E(S,L,R) - u_E(W,L,NR)}; \mu_{NL} = \frac{u_E(.,NL,F) - u_E(W,NL,NR)}{u_E(S,NL,R) - u_E(W,NL,NR)}; \mu_{ND} = \frac{u_E(.,ND,F) - u_E(W,ND,NR)}{u_E(S,ND,R) - u_E(W,ND,NR)}$$

Separating wPBE where only Weak People demonstrate

- The Strong play ND since they are indifferent between demonstrating or not.

- The Weak would demonstrate if there is any probability of the Elite extending the franchise when observing a demonstration.
- If the Elite has a system of beliefs that allows them to be best-responding when they extend the franchise after observing a demonstration, then there are many separating equilibria (six specifically) where only the Weak demonstrate.

5. Application of the model

5.1. Application to Chile

In this section, the greatest protests and demonstrations of the last decade in Chile are studied, so the franchise extension is understood. The major demands of the Chilean society have been on education and the pensions system. Both of them were an inheritance from the dictatorial regime of Augusto Pinochet (1973-1990) and have been widely criticised since the beginning of the democracy in the 90's.

In 2011 takes place one of the greatest mobilisations since the beginning of the democracy in Chile. It is not the first, nor the last, student mobilisation in the Latin American country. This student movement that began on April of 2011, won public support and got to 180 thousand people in a demonstration in September of the same year. There were many expressions of the discontentment of the student population, not only demonstrations and could not be controlled by the Chilean government for many months. This student movement obtained massive public support for almost a year and some of the leaders are deputies nowadays. Many organisations including the “Central Única de Trabajadores” (CUT), the greatest union aggrupation of the country, supported them and they called a general strike of two days (Gajardo, 2011, pp. 292-296) (Pulgar, 2011). Nonetheless the franchise was not extended in 2011 nor in 2012 (when the mobilisations came to an end).

In 2016 the social movement “No Más AFP” called for many national demonstrations against the pension system. Where “AFP” is the abbreviation of pension fund insurer in Spanish. The Chilean system consists on individual saving managed by private insurer companies. The movement reached more than 100 thousand people in Santiago and 750 thousand in the whole country participated in a huge family demonstration in August 2016. Which is great number for demonstration in a country of 18 million inhabitants. “No Más AFP” called for various protests and strikes during 2016 aiming for a reform of the law that was set up in 1981 under the regime of Pinochet and the end of the private management of the pensions (El Mostrador, 2016) (BBC, 2016). In this case the franchise was not extended either.

In 2019 a series of protests in Chile were initiated, beginning a social crisis and outbreak that was given the name of “Chile despertó” (Chile woke up). The trigger was the rise in

the price of public transport on the 6th of October, after which students showed their discontentment through massive evasions. The demonstrations aggravated and there were serious confrontations between civilians and the police and pillages until the point where the president of the Republic, Sebastián Piñera, had to impose the state of emergency and a curfew after the 18th of October sending the army to the streets in order to control the population (El Mostrador, 2019-1) (BiobioChile.cl, 2019).

From the 18th of October until the 10th of November of 2019 more than 3,7 million people joined the demonstrations in Chile, with the major focus in Santiago (Cooperativa.cl, 2019). Just after the outbreak, Bloomberg labelled this event as “the biggest social discomfort since Augusto Pinochet” (El Mostrador, 2019-2). Albeit the social outbreak began as a reaction to the rise of the price of public transport, the demonstration gained weight as it converged to a public display of discontentment about the high costs of living and the lack of public policies (Deutsche Welle, 2019).

The response of the government of Piñera at first was an attempt to suppress the protests by using the armed forces. In fact, the Human Rights Watch denounces Chile for violations of the Human Rights, consequence of police abuse (La Vanguardia, 2019). Social leaders of the protests asked for the resignation of the president and for a new constitution for the Latin American country. Media figures summed up to this petitions and Piñera had to give in to public pressure and call a plebiscite to vote for or against a new constitution and which organism should redact it (Biobiochile.cl, 2019-2) (Servicio Electoral de Chile, 2019). Allowing a possible transformation of education and pensions system through it.

Applicating the model to Chile’s case, Chile’s government is the Elite of the signalling game. It is true that in the Signalling Demonstrations model, the society is under an autocratic regime and that is the reason of using the term Elite. The term Elite might be less representative of a current’s State reality, it is a simplified concept to understand that is only few citizens who make the public decisions. In a state, the decisions are commonly influenced by the preferences of affluent individuals who are connected to the representatives of a government. That is why, the term Elite is very useful for this thesis. Moreover, normal citizens do not have direct access to public policy, there is no connection between their preferences and policymaking (Wouters and Walgrave, 2017, pp. 362).

The main goals of the demonstrators in Chile were to achieve a better public education, pensions system and in 2019 a combination of various objectives with analogous characteristics. Thus, those petitions are up to some level a redistribution. Demonstrators in Chile are an agent (People) and have a type.

Demonstrations in Chile can be explained by the wPBE from Section 3, in which both types of People demonstrate. In 2011 and 2016, when the franchise is not extended, Nature randomly picked Weak as the type of People. Hence, the demonstrations are not as large, because the probability of “small” demonstration was higher. After not achieving a franchise extension (redistribution policy) they do not start a revolution because the organisation costs are great.

In 2019 the demonstrations are followed by millions of people, being definitely larger. This can be explained by Nature picking the type as Strong People and having a greater probability of achieving a large demonstration or by being Weak but reaching the path of large demonstration, even if the odds were lower. Thus, Chile’s government extends the franchise fearing a possible “revolution” (loss of voters, motion of censure or revolution itself).

As it has been discussed, the empirically observable equilibrium in Chile according to the model consists in People demonstrating regardless of their type. The Weak using such demonstration as a signal to achieve a franchise extension, since if a large demonstration is obtained it can mislead the Elite to think they are of the Strong type. However, in 2011 and 2016 after observing a “small” demonstration and the following the lack of franchise extension there were no signals of “revolution”. This is the reason of considering the People were of the Weak type these two years. However, in 2019 after observing a large demonstration the franchise is extended. Having the same problem as the Elite, the type of the People in 2019 cannot be distinguished. One might say that in this year the People were Strong, because after the repression of the police the social movement could not be stopped. This topic is opened for further discussion.

5.2. Further Applications

As it was discussed in Section 4, the franchise extension only when a large demonstration is observed is not the unique equilibrium of the model. Nonetheless, this equilibrium can

be observed in more places aside from Chile. The term “yellow vest” is not uncommon in 2019. After months of demonstrations and protests, the issues claimed had to be included in the French agenda. The demonstrators could not be controlled nor ignored and the franchise was extended to some extent (New Yorker, 2019).

Topics like inequality, corruption or political freedom have caused many demonstrations around the world in 2019. Not in all the regions where protests were broadly followed by population there has been a franchise extension, nonetheless it creates a public plaint. Catalonia, Hong Kong, UK, Egypt, or Lebanon are just some of the regions that showed a considerable social disillusionment (BBC, 2019).

Other topics have climbed positions in political agendas due to demonstrations. For example, climate change demonstrators achieved a certain degree of franchise extension. Climate topics were included to political agendas of many countries and gained weight after worldwide demonstrations as the Global Climate Strike (BBC, 2019).

6. Conclusions

This Master's thesis consisted on the study of demonstrations as signals. The main objectives were the design of a signalling model in which demonstrations can be treated as signals, the proof of an empirically observed equilibrium and the application of the model to real life situations, specifically to the demonstrations lived in Chile in 2019.

In the Signalling Demonstrations Model the People which can be of two types (Weak or Strong) can choose to demonstrate or not. The demonstrations can be large or small, and the Strong have more chances of achieving a large demonstration. The Elite, who are in power in an autocratic regime, cannot distinguish the types and have to decide between extending the franchise or not. The specific pooling equilibrium where both types demonstrate, and the franchise is extended only when a large demonstration is observed is proven.

In spite of the hard assumptions of the model, which are discussed in Section 4, the applications of the model to the demonstration in Chile are studied. Exploring the differences in the greatest demonstration that the Latin American country has experienced this last decade. It is observable that when the demonstration was large enough (2019), compared to 2011 and 2016, the franchise was extended by the government. Extensions of the franchise worldwide can be explained by this model.

Nowadays, there are many social movements and demonstrations which could become interesting events for further study. Studying the Signalling Demonstrations Model as a repeated game can also be an attractive branch to follow for future research.

The study of social movements can be of key importance in a decade of increasing demonstrations worldwide. The game theoretical approach can be helpful in the understanding and management of this kind of social phenomena.

7. References

Acemoglu, D. and Robinson, J.A. (2000), “Why Did The West Extend The Franchise”, *The Quarterly Journal of Economics*, November 2000, pp. 1167-1199.

Barberà, S. and Jackson, M.O. (2019) “A Model of Protests, Revolution, and Information” Working Paper.

BBC (2016), “Miles protestaron en Chile contra el sistema de pensiones privadas”, BBC Mundo, available: <https://www.bbc.com/mundo/noticias-america-latina-37150486> [last visualisation 13/08/20].

BBC (2019), “Do today’s protest have anything in common?”, BBC, available: <https://www.bbc.com/news/world-50123743> [last visualisation 13/08/20].

BiobioChile.cl (2019-1), “Ordenan toque de queda a partir de las 0:00 horas en toda la región de Valparaíso”, Radio Biobio Chile, available: <https://www.biobiochile.cl/noticias/nacional/region-de-valparaiso/2019/10/19/determinan-toque-de-queda-en-provincia-de-valparaiso-a-partir-de-las-0000-horas.shtml> [last visualisation 13/08/20].

BiobioChile.cl (2019-2), “Líderes sociales exigen Asamblea Constituyente y seis medidas anti abusos de corto plazo”, Radio Biobio Chile, available: <https://www.biobiochile.cl/noticias/nacional/chile/2019/10/21/lideres-sociales-exigen-asamblea-constituyente-y-seis-medidas-anti-abusos-de-corto-plazo.shtml> [last visualisation 13/08/20].

Cooperativa.cl (2019-1), “Secundarios protestaron contra el alza del Metro con masiva evasión”, Radio Cooperativa Chile, available: <https://www.cooperativa.cl/noticias/pais/transportes/metro/secundarios-protestaron-contr-el-alza-del-metro-con-masiva-evasion/2019-10-14/201854.html> [last visualisation 13/08/20].

Cooperativa.cl (2019-2), “Más de 3,7 millones de personas han asistido a manifestaciones durante la crisis, según Carabineros”, Radio Cooperativa Chile, available: <https://www.cooperativa.cl/noticias/pais/manifestaciones/mas-de-3-7-millones-de-personas-han-asistido-a-manifestaciones-durante/2019-11-12/071637.html> [last visualisation 13/08/20].

Deutsche Welle (2019), “Chile: ¿Por qué explotó el país tranquilo de Sudamérica?”, Deutsche Welle, available: <https://www.dw.com/es/chile-por-qu%C3%A9-explot%C3%B3-el-pa%C3%ADs-tranquilo-de-sudam%C3%A9rica/a-50908967> [last visualisation 13/08/20].

El Mostrador (2016), “Marcha contra las AFPs congrega a más de 100 mil personas en la capital y 750 mil en todo el país”, El Mostrador/ Agencias, available:

<https://www.elmostrador.cl/noticias/pais/2016/07/24/marcha-contra-las-afps-congrega-a-mas-de-100-mil-personas-en-la-capital-y-750-mil-en-todo-el-pais/> [last visualisation 13/08/20].

El Mostrador (2019), “Bloomberg: "Santiago despierta en la devastación"”, El Mostrador Mercados/ Agencias, available: <https://www.elmostrador.cl/dia/2019/10/19/bloomberg-santiago-despierta-en-la-devastacion/> [last visualisation 13/08/20].

Gajardo, V. (2013) “El resplandor de las mayorías y la dilatación de un doble conflicto: el Movimiento Estudiantil en Chile el 2011” *Anuario del Conflicto Social*, Vol. 1(1). doi:<https://doi.org/10.1344/test.acs.2011.1.6256>

La Vanguardia (2019), “HRW denuncia graves violaciones DDHH en Chile por abuso policial en protestas”, La Vanguardia, available: <https://www.lavanguardia.com/politica/20191126/471886371181/hrw-denuncia-graves-violaciones-ddhh-en-chile-por-abuso-policial-en-protestas.html> [last visualisation 13/08/20].

Pulgar, C. (2011), “La revolución en el Chile del 2011 y el movimiento social por la educación”, Diario UChile, available: <https://radio.uchile.cl/2011/09/20/la-revolucion-en-el-chile-del-2011-y-el-movimiento-social-por-la-educacion/> [last visualisation 13/08/20].

Servicio Electoral de Chile (2019), “Servicio Electoral realiza lanzamiento de Plebiscito Nacional 2020”, SERVEL, available: <https://www.servel.cl/servicio-electoral-realiza-lanzamiento-de-plebiscito-nacional-2020/> [last visualisation 13/08/20].

The New Yorker (2019), “The Story of 2019: Protests in Every Corner of the Globe”, The New Yorker, available: <https://www.newyorker.com/news/our-columnists/the-story-of-2019-protests-in-every-corner-of-the-globe> [last visualisation 13/08/20].

Wouters, R. and Walgrave, S. (2017) “Demonstrating Power: How Protests Persuades Political Representatives”, *American Sociological Review*, Vol. 82(2), pp. 361-383.