PRESIDENTIAL APPROVAL IN COSTA RICA: EXPLAINING TYPICAL AND UNUSUAL PATTERNS¹

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Abstract

We analyze presidential approval ratings in Costa Rica from 1980 to 2016, seeking to explain typical cycles of "honeymoon", decay, and recovery, and the deviations that emerge from them: the two presidential terms of Oscar Arias. First, we show that party fragmentation has affected electoral support of the winning president and, as a consequence, his or her approval rate at the beginning of the mandate (i.e. the "honeymoon"). Using time series analysis, we then go on to model approval ratings as a function of economic and political variables. We find that social expenditure matters more than the macroeconomic indicators, and that the "Arias exceptionality" could be better understood as a result of higher social expenditure during his government and the coattails of the Nobel Peace Prize that he was awarded. Thus, social policy could be added to the theories of approval as a relevant variable in some contexts.

Keywords: executive approval – popularity – economic voting – social expenditure – Costa Rica

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Resumen

Analizamos la aprobación presidencial en Costa Rica entre 1980 y 2016, para explicar casos típicos de "luna de miel", caída y recuperación, así como las desviaciones que surgen en los dos períodos presidenciales de Oscar Arias. En primer lugar, mostramos que la fragmentación del sistema de partidos ha afectado el apovo electoral del presidente electo y consecuentemente la aprobación al inicio del mandato (conocida como "luna de miel"). Con el análisis de series de tiempo, modelamos la aprobación en función de variables económicas y políticas. Encontramos que el gasto social es más importante que los indicadores macroeconómicos y que la "excepcionalidad de Arias" puede ser mejor comprendida como resultado del gasto social durante su gobierno y los efectos del Premio Nobel de la Paz que le fue otorgado. Por lo tanto, el gasto social podría tomarse en cuenta en futuras investigaciones que busquen explicar la aprobación presidencial en contextos similares.

Palabras clave: aprobación presidencial - popularidad - voto económico - gasto social - Costa Rica

Introduction

What makes a government liked by its citizens? What makes a president popular? These questions, referred to respectively as executive approval and the popularity of the incumbent, have been studied in several developed democracies. Findings are robust regarding the stable effects of the state of the economy on the cycle of approval (Bellucci & Lewis-Beck, 2011), although major events like wars and political scandals matter as well. Since one may wonder how results might behave in developing countries and in new democracies, scholars are recently turning their attention to novel contexts such as Latin America (Carlin, Love, & Martínez-Gallardo, 2015a and 2015b; Carlin & Singh, 2015; Johnson & Schwindt-Bayer, 2008).

Approval in Latin American countries behaves as expected: there is a pattern of honeymoon, decay, and growing support at the end (Carlin et al., 2018), and governments

are punished by mediocre economic performances (Lewis-Beck & Ratto, 2013; Nadeau et al., 2017). However, deviations arise upon closer inspection of individual cases. Despite showing the typical cycle of approval, Costa Rica, one of Latin America's oldest democracies, reveals some irregularities throughout the two nonconsecutive terms of former president Oscar Arias (Carlin et al., 2018). These outlier cases offer an interesting opportunity for research.

First and foremost, Costa Rica has maintained democracy uninterrupted for around 70 years, counting 16 presidential terms and 14 individual presidents (Laura Chinchilla being the one woman among them) from 1949 to 2018.4 Given the scarcity of long-standing presidential democracies in the world (Cheibub, 2007), Costa Rica offers valuable data to test the classical function of executive approval. Secondly, because the deviations detected concern the same president, his personal traits can be isolated from the structural conditions of a presidency; e.g. the economy. Was Arias's presidency exceptional because he held office under special circumstances, or was it exceptional notwithstanding those conditions? Were his policies so good that they resulted in exceptionally positive ratings? Alternatively, since current surveys usually place Arias as the best ranked politician and former president (Ciep, 2017), are there particular features of his political leadership that caused his atypically favorable approval?

To answer these questions, we first review the main theories of presidential approval. Next, we give some background on the political and institutional context of Costa Rica, focusing on institutions related to citizens' accountability and changes in the party system. This background information will be decisive when assessing the generalizability of our case-study findings. We then formulate and justify our hypotheses regarding presidential approval in Costa Rica. The results show first that party fragmentation

⁴ José Figueres Ferrer and Oscar Arias were reelected nonconsecutively.

has affected the initial approval, since elected presidents reach office with lower electoral consensus. Second, economic variables are not as consistent of predictors of approval as expected, while social expenditure does exhibit significant effects. Third, "Arias exceptionality" can best be understood as a combination of higher social expenditures and the Nobel Peace Prize with which he was presented.

Theoretical explanations of presidential approval

Research on presidential approval converges on two main explanatory dimensions: an economic and a political one (Bellucci and Lewis-Beck, 2011). That is, presidential approval is usually studied through the following function:

Popularity = f (economics, politics).

Economic explanations of approval are closely related to the theory of economic vote, and together form what is known as the vote and popularity or VP-function. This perspective assumes that voters and citizens reward and punish the incumbent according to real economic conditions, as well as the economic evaluations of the citizens (see Lewis-Beck and Stegmaier, 2007 and 2013). When people are satisfied with the economy, they are more prone to vote for the incumbent ("V" in VP-function) in the next election and more eager to support the government ("P" in VP-function).

This popularity function has proven to be quite robust. It fits better than the vote function (Lewis-Beck and Paldam, 2000), and it appears to be stable across countries (Bellucci and Lewis-Beck, 2011). As the latter authors say, "[...] the economic signal is clear and consistent. Perceiving the economy in decline, electors withdraw their support from the government leader" (206). Contrary to what critics may think, the theory does not expect people to have comprehensive or up-to-date knowledge of real economic conditions, such as unemployment and inflation rates, and so forth. Instead, people's perceptions on the general state of

the economy are accurate predictors of popularity (Sanders, 2000). Interestingly, most empirical studies have only considered economic outcomes such as unemployment, GDP growth and inflation, largely leaving aside social investment in healthcare, education and pensions, among others, as explanatory variables.

Alongside the economy, other political variables also influence presidential approval. The time in office is said to negatively affect approval, since the incumbent must take decisions and react to issues that will increasingly create detractors (Mueller, 1970). Besides the "natural" cycle of decay, specific events such as scandals can also hinder the incumbent's popularity (Carlin, Love, & Martínez-Gallardo, 2015a; Memoli, 2011). International, specific, and dramatic events that involve the country and the president directly, called "rally 'round the flag" points (Mueller, 1970: 21), affect executive approval either in positive or negative ways (Gronke & Brehm, 2002). Likewise, public reaction toward an event and the consequence on approval depends on how the media handles the event -i.e. priming (Bellucci & De Angelis, 2013; Kelleher & Wolak, 2006; Newman & Forcehimes, 2010)- and the salience of the issues (Edwards, Mitchell, & Welch, 1995; McAvoy, 2006).

Institutions are only indirectly related to approval. Powell and Whitten (1993) coined the concept of "clarity of responsibility" for institutional features that have a moderating effect on popularity; that is, they do not directly influence approval, but indirectly affect the ability of citizens to assign responsibility for economic and political outcomes. For instance, the difference between presidential and parliamentary systems is noteworthy. In the former, like Costa Rica, the capacity to judge government performance is higher since no other mechanism besides elections can remove the head of the executive, placing increased emphasis on popular approval (Hellwig and Samuels, 2008). Moreover, approval in presidential regimes underscores the leader as an individual, whilst the parliamentarian system stresses

the role of the party in government.⁵ Another critical institutional feature that conditions approval is the unified versus divided government (Powell & Whitten, 1993). Minority governments are more capable of blaming other parties for their failures, although their effects on approval might vary according to the policy area (Carlin, Love, & Martínez-Gallardo, 2015b). All in all, there is a complex relationship between outcomes, institutions, and popularity.

Studying approval in Latin America and Costa Rica

Recently, the VP-function has been put to the test in the Latin American region, using the vote as the dependent variable (Lewis-Beck & Ratto, 2013; Murillo and Visconti, 2017; Nadeau et al., 2017; Ratto, 2013). The research agenda on popularity is experiencing fruitful development as well thanks to the new Executive Approval Database 1.0 (Carlin et al., 2016). This source combines data on popularity from different surveys across nations and time, estimating a sole indicator of approval based on James Stimson's (1991) algorithm.

This dataset has proven useful in testing the impact of scandals on approval under diverse economic conditions among Latin American countries (Carlin, Love, & Martínez-Gallardo, 2015a), studying the effects of the institutional powers of the presidency (Carlin and Singh, 2015), analyzing the relationship between clarity of responsibility and policy domains (Carlin, Love, & Martínez-Gallardo, 2015b), and confirming the cyclicality over the presidential term (Carlin et al., 2018).

Regretfully, not many studies have dealt specifically with government approval in Costa Rica. One of a handful was performed by Seligson and Gómez (1987), who found

⁵ We thank Professor Paolo Bellucci for this point.

⁶ Due to space constraints, we are not reviewing individual studies of approval in Latin American countries.

Costa Rican citizens to be sensitive to the economic crisis of the 1980s, when inflation, unemployment, and public debt rose to unprecedented levels. They showed that Costa Ricans blamed politicians for the crisis, as expected by the economic theories of popularity.

It is intriguing that most studies of public opinion in Costa Rica have placed more emphasis on system support than executive approval (e.g. Alfaro-Redondo and Seligson, 2012; Booth and Seligson, 2009; Seligson, 2002; Vargas-Cullell, Rosero-Bixby, & Seligson 2004). We therefore suggest that, given the accomplishments of Costa Rica's democracy in terms of stability and consolidation, it is time to turn the attention from the way people see democracy to their evaluation of their government's performance. Before delving into typical and atypical patterns of approval in Costa Rica, however, we describe the institutional and political context in which government operates.

Institutional and political context of the case

To understand approval in the case of Costa Rica we focus on three institutional and contextual features: presidential powers, or lack thereof; changes in political and electoral competition; and the welfare regime.

Institutional features. Costa Rica stands out among other countries in the region for its democratic stability, and scholars classify the political regime as a full and uninterrupted democracy since 1953 (Mainwaring & Pérez-Liñán, 2013).

Like any other presidential regime, the national executive branch is headed by the President of the Republic, who is directly elected by the citizens for a four-year term, along with two vice presidents on the same ticket. In the direct election of the president, candidates need 40% of the valid votes to win; if this majority is not reached, a second electoral round is necessary (runoff). Legislative elections take place concurrent with the first round and there are no mid-

term elections. This institutional arrangement discourages split-ticket voting, thus promoting legislative majorities in favor of the elected president (Sánchez, 2007); however, this has been a harder goal to achieve since 1998.

The Constitution of 1949 established the attributions and duties of the presidency, as well as the relationship between the executive and the other branches of the government. Despite being a presidential system, in which the perception of citizenship is that the president predominates, the real capacity to govern largely depends on coordinated work with the parliament (Ramírez Cover, 2016: 12). The legislative and decree powers of the president are limited. According to the Institutional Legislative Power Index by Santos, Pérez-Liñán, & García (2014), Costa Rica ranks last among the sampled countries with a 0.32 and well below the Latin American mean of 0.46. Although the power to designate and remove ministers and vice ministers belongs exclusively to the president, the work of the executive is advanced on a collegiate basis, as acts of government must be endorsed both by the president and the appropriate minister. In addition, the Legislative Assembly exercises control over the cabinet via the minister's appearance in plenary and the possibility of censorship. In brief, the formal power of the president in Costa Rica is weak.

Another important feature regarding the presidency concerns the rules of reelection. Although it can work as a mechanism for rewarding or punishing incumbents, Latin American voters generally view reelection as a form of power accumulation, or *continuismo* (McConnell, 2010). In Costa Rica, a ruling of the Constitutional Court has allowed non-consecutive reelection of the president since 2003,7 limiting the accountability mechanisms available for the

⁷ This result came from the appeal presented twice by Oscar Arias to the Constitutional Chamber that ruled that the impossibility of a second term is unconstitutional (see Treminio, 2015). Besides Arias, former president José María Figueres pursued reelection in 2018 but failed to get the party nomination.

citizens at elections, which can reward or punish the party (Pignataro, 2017) but not the incumbent president.

Party system. While the institutional framework of the executive branch has been quite stable since the 1949 Constitution (except for reelection rules), the party system has changed dramatically in the past 20 years.

Political competition after the Civil War of 1948 has been characterized by two main political blocks, showing different stages in the formation of the opposition against Partido Liberación Nacional (National Liberation Party, PLN). The consolidation of the PLN in 1951 was an expression of the new social forces that won the Civil War. Since 1953, the PLN has competed in every election and become the major political force. On the other hand, the opposition used a series of alliances and electoral coalitions to compete against PLN, holding the presidency several times under different labels, until the formation of the Partido Unidad Social Cristiana (Social Christian Unity Party, Pusc) in 1983. Hence, the 1986 election marked a turning point toward the consolidation of the bipartisan system. The PLN and the Pusc gathered similar electoral shares, which encouraged the competitiveness between the two parties. From an ideological perspective, the system has a centripetal structure that brings both parties closer to the center (Hernández Naranjo, 2001: 256; Sánchez, 2003). Despite the 1980s economic crisis, bipartisanship brought stability to party competition until the end of the 1990s. The alternation of the executive functioned as a punishment to the party -PLN or Pusc- in government.

Studies have analyzed the changes that occurred in the party system after 1998, defining the process as one of electoral dealignment, characterized by diminished voter turnout, growing support for new political parties, electoral volatility, increased split-ticket voting, and constant questioning of the government authorities (Cascante, 2017; Hernández Naranjo, 2001; Raventós et al., 2005; Programa Estado de la Nación, 2015; Raventós, 2008; Rovira, 2001 and 2007; Raventós, Fournier, Fernández & Alfaro, 2012;

Sánchez, 2003 and 2007; Seligson, 2001). The electoral dealignment is closely related to the structural transformation of the party system from the two-party configuration to a multiparty one. As a result, changes in electoral behavior have affected not only the governability process, but also the system of rewards and punishments that was evident during the era of bipartisanship, namely the alternation of the parties (PLN and Pusc) in the presidency.

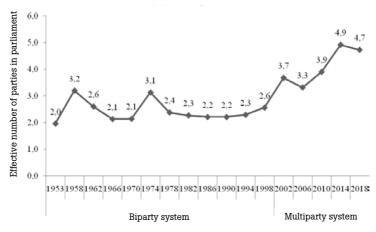


Figure 1. Party system fragmentation

Source: Brenes (2010). Effective number of parties in 2014 and 2018 was calculated by the authors.

From the 2002 elections and onwards, Costa Rica has had a much more fragmented structure of competition, as the rise in the effective number of parties suggests (Figure 1). The vote shares of PLN and Pusc decreased while the number of parties in the electoral competition increased. The first new parties that gathered more support were *Partido Acción Ciudadana* (Citizen Action Party, PAC), formed as a split of the PLN, and *Movimiento Libertario* (Libertarian Movement, ML), a right-wing party that emerged from the Pusc.

The traditional bipartisan party system was further shaken in 2004 when two former Pusc presidents, Rafa-

el Ángel Rodríguez and Miguel Ángel Rodríguez, were involved in corruption scandals.⁸ These events damaged their own party electorally and became a source of the malaise with politics. In addition, the last two presidential elections of 2014 and 2018 were won not by any of the players of the bipartisan era but by PAC, the most successful political party from the multiparty period.

The most significant change has come from the party system transformation and the ensuing greater party fragmentation. The dealignment era opened the door for new parties both in the legislative and the executive branches. Henceforth, the clarity of responsibility has been affected more by the changes in the party system and the inclusion of new actors than by significant changes in the institutional framework of the executive. It is thus expected that only the former will have some impact on presidential approval.

The welfare regime. Despite being a middle-income country, Costa Rica holds a special place in Latin America regarding social policy as a near universalistic social state. This is no accident, since empirical, cross-country studies evidence a strong link between democratic consolidation and social expenditure (Brown & Hunter, 1999; Huber, Mustillo, & Stephens, 2008).

During the second half of the twentieth century, the social security system in Costa Rica was gradually expanded to include all income groups under one unified system (Martínez Franzoni & Sánchez-Ancochea, 2014). Social spending grew as well, from 7% of the GDP in 1958 to 14.9% in 1980, being substantively higher than in other Central American countries (Martínez Franzoni & Sánchez-Ancochea, 2013; Filgueira, 2014). The universal services of health-care, education, and pensions are complemented by targeted policies for the poor (Martínez Franzoni & Sánchez-Ancochea, 2013). State interventionism is also re-

⁸ So far, no PLN president has been convicted of corruption, unlike these examples of the PUSC, so this issue has been excluded from the analysis of Arias's case.

vealed in the provision of the main utilities (water, electricity, and telephone) through public companies. What is more, many welfare services have demonstrated their resilience in the face of the economic crisis of the 80s and the structural transformations of the 90s (Martínez Franzoni & Sánchez-Ancochea, 2013: 58). This comparatively robust welfare state and the stable evolution of social policies suggest that social outcomes are desirable and well regarded by the citizens.⁹

Social spending has been one of the main electoral proposals of PLN, endorsing the expansion of opportunities, the construction of a society based on solidarity and equity, and the role of a strong state as a necessary in the creation of conditions of social justice, especially for housing programs and the fight against poverty (Solis Rivera & Alpizar, 2003: 25). In view of the importance of social investment in the Costa Rican democracy and the electoral value that this represents for the PLN, we consider this variable to be a meaningful explanation to be explored.

In brief, the Costa Rican case is one of institutional and democratic stability, with significant changes in the party system (mainly fragmentation), weak president powers, and a robust welfare state. These three characteristics will help us propose hypotheses in the following section.

Presidential popularity in Costa Rica and hypotheses

Figure 2 shows the ebbs and flows of monthly presidential approval (from August 1978 to April 2016), as registered in the Executive Approval Database 1.0 (Carlin et al., 2016). Overall, there is a visible cycle of honeymoon, decay, and recovery. Upon closer inspection, some deviations emerge: the impressive low approval ratings between 1979 and 1982 are without doubt related to the economic cri-

⁹ Public opinion favors the government intervention in the economy. According to survey data, 94.3% believe that the State should guarantee free access to health services and public education (Pignataro and Cascante, 2017: 28).

sis of that period. Thereafter, incumbents seem to follow the traditional "U" pattern in their mandates (see Stimson, 1976). Still, the comparative analysis among Latin American countries performed by Carlin et al. (2018) highlighted some deviations from the standard cyclicality during the two nonconsecutive terms of president Oscar Arias (1986–1990 and 2006–2010). In both presidential terms, there is an unexpected improvement halfway through the mandate and strong recoveries at the end. In addition, the honeymoon is present during the first Arias presidency, not so in the second one.

Carazo Monge Arias 1 Calderón Figueres Rodríguez Pacheco Arias 2 Chinchilla Solis

80

70

60

30

20

may 78 may 82 may 86 may 90 may 94 may 98 may 02 may 06 may 10 may 14

Figure 2. Presidential approval (monthly)

Source: The Executive Approval Database 1.0 (Carlin et al., 2016).

To account for these peculiarities, we propose two general explanations that apply to the whole period, not just Arias's presidencies. First, the electoral support is related to the magnitude of the honeymoon (Carlin, Martinez-Gallardo, & Hartlyn, 2012: 208-209). As described before, the party

¹⁰ The statistical analysis confirms that when (quarterly) approval is regressed on time there is no trend, but a significant quadratic effect of the time in office exists.

system has changed radically in Costa Rica since 2002: the number of significant parties increased, making elections more competitive and the outcomes closer. Before 2002 no runoff elections were needed, since every winner was able to reach the 40% of the vote required; afterwards, runoffs have been held in 2002, 2014, and 2018. Accordingly, while Arias 1 ran under the period of bipartisan competition, facing only one big rival party, Arias 2 did so under a multiparty system configuration and won the election with little more than one percentage point over his adversary. Under a context of higher competitiveness and fragmentation, presidents start their terms backed by smaller proportions of the electorate, reducing the probability of having a consensual approval at the beginning of their mandates. Therefore, we expect that the vote share of the presidential winner is positively associated with the initial approval ratings -i.e. the honeymoon (H1a). Accordingly, since majorities are harder to get with more competitive parties, fragmentation shrinks early popularity of presidents (H1b).

Second, we know that, according to the VP-function, a good economy will lead to rewarding the incumbent (Bellucci & Lewis-Beck, 2011; Lewis-Beck & Paldam, 2000; Sanders, 2000). This has been proven true in the United States and Western European democracies. Given its democratic and institutional stability, the VP-function should be valid for Costa Rica as well. Hence, economic variables impact popularity (H2).

However, we argue that, in addition to economic variables such as inflation, growth, and unemployment rates, Costa Ricans also take the government's performance on social policy into account. As previously explained, over the decades Costa Rica has built a strong, near universal welfare regime (Martínez Franzoni & Sánchez-Ancochea, 2013 and 2014), backed by public opinion and traditional political parties, especially PLN. Under these conditions, citizens might set a higher bar for incumbents: not only should the governments provide good economic results, but also social

investment in health care, pensions, education, and targeted policies for low-income brackets.

There is some prior empirical evidence backing this argument. Studies have found that satisfaction with public services positively impacts trust in government (Christensen and Laegreid, 2005) and political support for the president (Pignataro, 2016). Furthermore, in Costa Rica, both of Arias's mandates -the outliers- are closely identified with social programs. Throughout the electoral campaign and his first presidency, Arias advanced policies on housing, opening a new funding system for house development (Banco Hipotecario de la Vivienda) and distributing vouchers for low-income families (Rojas, 1995; Trejos & Sáenz, 2011). In his second term, Arias enacted the conditional transfer system for education known as Avancemos, seeking to prevent school dropouts. A relative boost in social expenditure during Arias's governments, as exemplified by the abovementioned programs, could be the reason behind his unexpectedly high approval during midway through the term and toward the end. The positive effect of social programs on presidential approval is expected to come not only from the direct impact on the recipients and their families -who would react positively toward the government- but also from public opinion in general, since programs are advertised through the different political communication channels. To sum up, we will test if higher social expenditure increases the executive approval (H3).

Results

To analyze the connection between vote share and the honeymoon (H1), we use the percentage of votes secured by the presidential winner on the first electoral round. In order to have an indicator of electoral support with a denominator that is similar to that of approval (i.e. the whole population), we calculate the percentage of votes over total electorate (not over the *valid* votes).

Year	President	% of votes over total	Approval 1st quarter	Approval 2 nd quarter
1982	Monge	45.1	17.6	29.2
1986	Arias 1	41.7	73.8	51.3
1990	Calderón	41.1	76.0	42.5
1994	Figueres	39.3	53.8	43.6
1998	Rodríguez	31.9	36.4	34.2
2002	Pacheco	25.9	51.4	58.8
2006	Arias 2	26.1	35.2	45.3
2010	Chinchilla	31.8	51.7	52.4
2014	Solís	20.5	49.3	44.4

Table 1. Vote shares and honeymoon

Source: approval ratings from Carlin et al. (2016); electoral data from Tribunal Supremo de Elecciones (2014).

The correlation between the vote share and the approval during the 1^{st} quarter is lackluster:r = 0.133. However, there are two extreme values: Monge's approval is unusually low (17.6%), while Calderón's is too high (76.0%). This could be due to an estimation error by the algorithm giving too much weight to previous values.11 If we omit these two outliers while lowering the number of cases, the correlation coefficient rises to r = 0.596. The correlation with the second quarter is nevertheless negative: r = -0.407. In conclusion, there is some evidence that electoral support helps the president enjoy a brief period of favorable ratings of one quarter -but no longer than that-, backing H1a. Furthermore, fragmentation makes honeymoons less likely, as they are negatively correlated (r = -0.109). In the bipartisan period (1982-1998) the mean vote share received was 39.8%, while during fragmentation era (2002-2014) it was 26.0%. Accordingly, the average approval during the first quarter dropped from 54.7% (or 51.5% including outliers) to 46.9%. Our data back H1b.

 $^{^{11}}$ In individual surveys, Monge's rating was 24.0% in July while Calderón's was 34.0%, hence the algorithm underestimates the former and overestimates the latter. We thank Ryan Carlin for this clarification.

We now consider the whole quarterly time series in Costa Rica from 1980 to 2016, using Carlin et al.'s (2016) data.¹² Table 2 presents the estimated OLS time-series models.¹³ Since a correlogram (not shown because of space constrains) suggests the presence of an autoregressive effect, we include the dependent variable lagged one quarter among the set of independent variables.

The first model specifies a classical VP-function by including GDP growth, unemployment, and inflation (all lagged variables). None is significant at the conventional levels, implying that the economy is not the main driver of presidential approval. The mainstream literature also suggests that the year of the term (or cost of ruling) and the effective number of parties (measuring fragmentation) may have an impact on popularity ratings. However, neither is a significant predictor when added to the economic model (estimates not shown). Thus, we cannot verify H2 that claims economic variables influence approval.

Since we proposed that social expenditure has positive effects over approval, a second model includes social expenditure growth (interannual change) and social expenditure over GDP.¹⁵ Both variables are indirect sources of social policy outcomes. The assumption is that when social ex-

¹² The 1.0 database lacked information for the last two quarters of 2016. We completed those years by imputing the values from the surveys of August and November of Centro de Investigación y Estudios Políticos(CIEP).

The time series is stationary according to both the Dickey-Fuller and the KPSS tests. Also, suspicions could arise that the errors are heteroskedastic, so an ARCH model could be preferable, but this option was rejected through Engle's Lagrange multiplier test.

Inflation rates and GDP growth were compiled by the International Monetary Fund, available at https://www.imf.org/en/Data. Unemployment rates were gathered by Programa Estado de la Nación from official sources. Quarterly percentage changes were calculated from the original yearly data using the Palmer and Whitten's (1999) method, as explained in Carlin, Love, and Martínez-Gallardo (2015a).

Social expenditure was calculated by Mata and Trejos (2017) with data from the national budget office of the Central Bank of Costa Rica, the National Institute of Statistics and Census, and other involved institutions. It sums expenses on education, health, housing, and culture and recreation, including anti-poverty programs, pensions, and scholarships, among others.

penditure is higher, the government implements more and better programs, thus producing social outcomes perceived by citizens. Supporting H3 and controlling for economic variables, the model finds there to be a positive, significant effect (p< 0.10) of social expenditure growth on approval, but not of social expenditure over GDP.

Could this equation account for Arias's exceptional higher approval? We tested this using dummy variables for each Arias term (model 3). These dummy variables are significant (p< 0.05), implying that approval was higher on the average during his tenure. Instead, social expenditure growth is not significant any more (social expenditure over GDP was excluded from the model given its non-significance in model 2). The exceptionality persists.

It is possible that social expenditure growth was particularly important during the Arias years, and that the dummies are thus masking the effects of said growth. Either Arias is a president with superior social expenditure growth, or he is a president with extraordinarily high approval for reasons other than social expenditure. To address this issue, we first estimated the interaction effects between Arias's term and social expenditure growth. However, these terms are not significant (results available upon request). Therefore, we delve into the political context of Arias's presidencies because, as the literature states, political events have an impact on approval.

The first Arias mandate was marked by an active foreign policy in Central America that sought to bring peace to the region. This goal was accomplished by the Esquipulas II Accords. For this work, Arias was awarded the Nobel Peace Prize in 1987.¹⁶

Conversely, the 2006-2010 Arias administration was characterized by social polarization regarding the Free

¹⁶ This was quite an acclaimed event by the international press due to the fact that it was nominated by only one person (Bjorn Molin, a member of the Swedish Parliament) and because it was an ongoing process, which also did not have the support of the president of the United States, Ronald Reagan (Schememann, 1987).

Trade Agreement between Central America and the United States of America (Cafta), which was finally approved in a referendum with a margin of 3.2 percentage points: 51.6% voted "Yes"; 48.4% voted "No" (Rojas Bolaños, 2009). On the international domain, Arias led a very active, multilateral foreign policy: he moved Costa Rica's embassy from Jerusalem to Tel Aviv. established relations with China. accomplished a non-permanent seat in the United Nations Security Council for a third time, took part in the mediation efforts in Honduras after the 2009 coup, and advanced global initiatives on environment and arms trade regulation (Segura Ramírez et al., 2010). Nevertheless, we believe that the Cafta referendum may have had a bigger impact on public opinion because of its domestic implications, the mass mobilizations -for and against-, and the fact it was a campaign issue in 2006.

Rather than relying on the dummy variables for Arias, we therefore include indicators for the most important political events during his tenure: the Nobel Prize (from the last quarter of 1987 until the end of his presidency)¹⁷ and the Cafta referendum (from the last quarter of 2007 on).¹⁸ Model 4 indicates, first, that the effect of social expenditure growth remains (p< 0.10). Second, approval is higher after the announcement of the Nobel Prize (p< 0.10), but not after the Cafta referendum. These results make sense given that the latter event yields almost equal proportion of "winners" and "losers" in relation to the outcome of the referendum. The Nobel Prize, instead, could be seen as a valence issue that brought fame and prestige to the country as a whole beyond partisan lines; that is, a positive "rally 'round the flag" event.

Additionally, we ran a fifth model with data from 1983 onwards, excluding several quarters with hyperinflation due to the economic crisis of the 1980s that could damage the overall estimation. Social expenditure and the dummy

¹⁷ The award was announced on October 13, 1987.

¹⁸ The Cafta referendum was held on October 7, 2007.

for Nobel Prize are still significant (p< 0.05) when confined to "ordinary" economic times, whereas referendum and the economic variables are not.¹⁹

Models 2, 4 and 5 help us confirm H3: social expenditure had a significant effect on presidential approval. After the crisis, a more stable economic period when social expenditure is increased by one percentage point from one year to the other, presidential approval grows by 0.3 percentage points. Considering the maximum and minimum empirical values in the series, the effect would range between a positive boost of 4.4 percentage points and a reduction of 3.7 on approval. Whether this is high or low is more the purview of a politician. The most important finding is that presidents do get credit for expanding social expenditure. If incumbents care for approval, social expenditure is a means of increasing it.

Do the models explain the "Arias exceptionality"? An examination of residuals from model 4 sheds some light. In Figure 4 the positive residual indicates that the model predicted a lower-than-observed approval (underestimation); while a negative means that the fitted value was higher than the real one (overestimation). We note there are several large residuals (more than 10 points) not only during Arias's presidencies, but throughout the time span. In Arias's mandates there are four large residuals: one positive (2nd quarter of 1987) and three negatives (3rd quarter of 1986, 1st quarter of 1988, and 3rd quarter of 2008). While Carlin et al. (2018) state that Arias's approval cycle deviated because of strong recoveries (positive observed values), we find the opposite: our model predicted higher approval rates in three quarters than what is observed (see Appendix). These outliers could be due to events that are not measured, or mismeasurement of independent variables. Either way, they seem to behave randomly.

 $^{^{\}rm 19}$ No model presents issues of error autocorrelation according to the Breusch-Godfrey test.

Table 2
OLS models for presidential approval (quarterly)

	Model 1	Model 2	Model 3	Model 4	Model 5
Approval _{t-1}	0.846***	0.842***	0.774***	0.812***	0.812***
	(0.0454)	(0.0452)	(0.0496)	(0.0466)	(0.0503)
GDP growth t-1	-0.221	-0.102	-0.162	-0.104	-0.245
	(0.294)	(0.305)	(0.296)	(0.300)	(0.308)
$Unemployment_{t-1}$	-0.406	-0.195	-0.0786	-0.0318	-0.262
	(0.492)	(0.599)	(0.487)	(0.503)	(0.511)
$Inflation_{t-1}$	0.0491	0.0659	0.0660	0.0695	0.00117
	(0.0550)	(0.0801)	(0.0549)	(0.0558)	(0.0634)
Social expenditure growth		0.190*	0.140	0.206*	0.264**
		(0.108)	(0.104)	(0.107)	(0.127)
Social expenditure over GDP		-0.0480			
		(0.328)			
Arias 1			4.690**		
			(2.000)		
Arias 2			4.964**		
			(1.907)		
Nobel Prize				4.448*	4.754**
				(2.364)	(2.366)
Cafta referendum				3.274	2.908
				(2.308)	(2.350)
Constant	8.911*	7.388	7.819	6.106	8.894*
	(5.028)	(6.932)	(5.017)	(5.128)	(5.316)
Observations	143	143	143	143	136
Adjusted R ²	0.727	0.729	0.746	0.737	0.716
Breusch-Godfrey test (p-value)	0.087	0.125	0.111	0.095	0.168

Standard errors in parentheses. p < 0.10, p < 0.05, p < 0.01

If the models accurately explain approval and the residuals show only random deviations, then there is no "Arias exceptionality". Nevertheless, Oscar Arias is without doubt a famous and worldwide respected politician, and approval may stem from personal prestige and reputation, according to some scholars (Neustadt, 1990). When current surveys ask about the retrospective approval of former presidents,

Arias usually ranks amongst the highest, suggesting the "Arias effect".²⁰

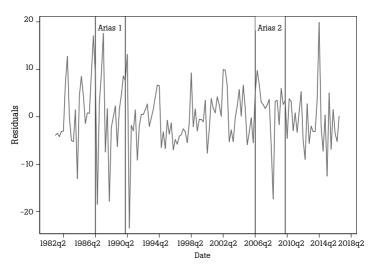


Figure 4
Analysis of residuals (model 4)

Nevertheless, Figure 5 shows that when the average grade is separated between partisans of the former presidents' party and the rest of the population, there is a statistically significant gap dividing both groups (7.7 vs. 5.6; p< 0.001). Arias's popularity among his supporters resembles that of Calderón (Pusc) among his; while non-partisans view Arias as only slightly more positive than other former presidents and even lower than Pacheco (Pusc).

Arias's overall mean approval rating is inflated by the fact that his party, PLN, draws the highest number of partisans. In conclusion, his political persona is not as homogeneously acclaimed as sometimes assumed, and partisanship plays a significant role when public opinion assesses former presidencies.

²⁰ However, his public standing may suffer in future surveys due to accusations of sexual assault that have recently emerged.

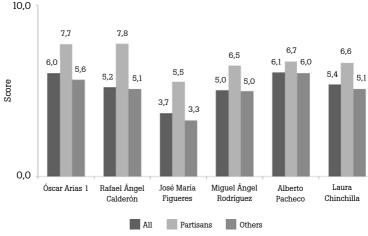


Figure 5. Popularity of former presidens (March, 2016)

Source: own elaboration based on CIEP (2017).

Discussion

This paper intended to shed some light on an understudied topic in Costa Rica: executive approval. As a long-standing presidential democracy with few significant constitutional reforms, it is a suitable and valuable case for analyzing the highs and lows of incumbents' popularity. The challenge lay in examining both ordinary and unusual presidential approval rates from 1980 to 2016. Oscar Arias's two terms showed a typical pattern, defined by different levels of initial approval ("honeymoon") and outstandingly high levels halfway through and at the end.

A quick review of the historical context reveals that clarity of responsibility should have changed little since the establishment of free and fair political competition: the electoral rules and the formal powers of the president have remained the same. However, the party system and electoral behavior have suffered deep transformations since 1998: fragmentation increased, and the party system evolved

from a two-party to a multiparty configuration. Since then, electoral competition has become more intense given the plurality of actors.

We have shown that the vote share has an impact on the initial approval ratings of Costa Rica's presidents, which is why president Arias enjoyed an approval of 62.6% in the first two quarters of 1986, while it was only 40.3% in 2006. His vote shares (over the total number of voters) were just as different: 41.7% and 26.1%. Thus, the fragmentation of the party system has indirectly impacted presidential approval. Under multi-party competition, it becomes harder to receive votes from large proportions of the electorate that could easily be translated to initial support when in office.

We subsequently tested hypotheses regarding the positive impact of economic conditions and social expenditure on approval. We stated that, in a country with a near universal social state, citizens will expect not only good economic performance -growth, low unemployment, controlled inflation- but also social investment in education, healthcare, housing, basic utilities, and targeted programs to fight poverty, among others. The time series of approval in Costa Rica showed some nuances regarding the presidencies of Oscar Arias since he enjoyed particularly good ratings in the middle and toward the conclusion of both terms. Given our knowledge of prominent social policies enacted by his government on housing and education, we suspected that its exceptionality was due to social expenditure. The models showed that economic conditions, the term year, and the effective number of parties, although highlighted by the literature, did not have an impact on approval. Conversely, social expenditure did exhibit significant effects.

Although the approval during Arias's presidencies was higher than the average, when we control for political events during his tenure —namely the Nobel Peace Prize and the Cafta referendum— social expenditure growth proves to be significant. Hence, instead of a general "Arias effect", there is a specific impact of social programs and investment, and

the national recognition of his foreign policy in Central America that culminated with the Nobel. While the prize could be regarded as a valence issue for the country, a "rally 'round the flag" event, the Cafta referendum was highly polarizing, not affecting approval since public opinion was split in half between supporters (Arias's position) and opponents of Cafta. Finally, we observed that Arias's reputation as a former president is largely partisan, since his party, PLN, has remained strong—despite some recent electoral decline—since 1953.

Our conclusion on the validity of social expenditure as a predictor of approval cannot reject economic theories of voting; rather, we are complementing them. In our view, if citizens are satisfied with both economic and social outcomes, incumbents are rewarded either through popularity indicators (as we tested), or in the ballot box (which we did not examine). On the one hand, we suspect that the existence of a near universal welfare regime in Costa Rica is a scope condition for the validity of social expenditure as an explanatory variable. Cross-country comparisons between nations with dissimilar social regimes are needed to verify the external validity of the hypothesis. On the other, future studies require a more accurate and comprehensive measure of events (Newman and Forcehimes, 2010), including political scandals and international events, to reach more solid conclusions about the exceptionality (or not) of Arias's presidencies and the role of economic and social policies on mass approval of incumbents.

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Appendix Observed and predicted approval ratings (from model 4)

Arias 1					Arias 2			
Year	Quarter	Observed	Predicted	Year	Quarter	Observed	Predicted	
1986	2	73.8	64.8	2006	2	35.2	30.1	
1986	3	51.3	69.8	2006	3	45.4	35.6	
1986	4	54.4	51.5	2006	4	50.6	43.8	
1987	1	60.0	51.0	2007	1	51.6	48.5	
1987	2	73.3	55.7	2007	2	51.8	49.3	
1987	3	59.1	66.5	2007	3	51.2	49.4	
1987	4	61.3	59.6	2007	4	54.7	52.2	
1988	1	41.9	59.7	2008	1	58.6	54.9	
1988	2	41.8	44.0	2008	2	52.2	58.2	
1988	3	44.0	44.0	2008	3	35.8	53.0	
1988	4	48.1	45.8	2008	4	43.0	39.8	
1989	1	45.2	51.5	2009	1	49.2	45.8	
1989	2	50.5	49.0	2009	2	49.1	50.7	
1989	3	57.9	53.3	2009	3	56.5	50.5	
1989	4	67.8	59.2	2009	4	59.0	56.3	
1990	1	71.5	63.9	2010	1	61.2	57.8	