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Stagnated Liberalization, Long-term Convergence, and Index Methodology: Three Lessons from the CITRIX Citizenship Policy Dataset

Special Section Article

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Abstract

In this article, I present the second version of the Citizenship Regime Inclusiveness Index (CITRIX 2.0). It measures the inclusiveness of regulations for immigrants' access to citizenship across 23 OECD countries from 1980 to 2019, zooming in on four essential policy components: conditions regarding (1) birthright; (2) residence; (3) renunciation; and (4) integration. While explaining the construction of the dataset, I advance a synthetic approach to index methodology. The main idea of this approach is to use statistical dimensionality tests to validate deductively specified additive concept structures. This is the first lesson we can learn from CITRIX. After validating the index in terms of content, dimensionality, and convergence, a short empirical analysis presents two additional lessons. First, after two cycles of liberalization and subsequent restrictive turns, mostly in integration conditions, aggregate citizenship policy inclusiveness has stagnated, but liberalized overall. 2003 marks the peak of liberalization. Second, there has been long-term convergence constituted by two phases of convergence with one diverging phase in between. I conclude that liberalization is more limited, and convergence more pronounced, than often assumed. CITRIX offers a versatile toolbox for future research to explore citizenship policies and their correlates. Regular updates are planned.

Policy Implications

- CITRIX shows that liberalization in citizenship for immigrants has stagnated, and that policies have converged over the long run. Policymakers should consider these findings to situate and inform future citizenship reforms.
- Policymakers should be aided by social scientists and policy analysts in their search for better policies by employing CITRIX to explain variation in citizenship policies and to study their effects on immigrant integration and other social outcomes.
- CITRIX develops synthetic approach to index construction. Social scientists and policy analysts should consider this approach when designing tools to measure and compare policies.
- Funding institutions should consider investing in efforts to update and expand datasets that measure critical public policies. The second version of CITRIX highlights this potential.

1. What we can learn from a new citizenship policy dataset

In a world where there is stark inequality across nation-states, by assigning individuals to these states, citizenship policies confer specific opportunities associated with being a member of particular societies. The chance to get a passport from another country can re-shuffle the cards that individuals hold in all kinds of social dimensions, especially when the new passport grants membership in an affluent democracy, and even more so when the country of origin is poor. But citizenship is more than a passport, and it amounts to more than the (economic) opportunities it implies. Citizenship for immigrants is a fundamental especially in democratic societies because it endows them with the 'highest standard of equal treatment' (Bauböck, Honohan, Huddleston, Hutcheson, Shaw and Vink, 2013, p. 40). If access to citizenship were completely blocked, immigrants could never become full members of a democratic community. Thus, in many respects, access to citizenship for immigrants is key.

Given the fundamental importance of citizenship, it is not surprising that citizenship policy indices have boomed during the last two decades (Goodman, 2015; Helbling, 2013). However, existing datasets are not optimal in several respects. There are indicators that are crude in construction, for instance that of Fitzgerald, Leblang, and Teets (2014). By contrast, indicators such as MIPEX (at least in earlier

versions; Huddleston, 2015) could be considered too detailed and expansive in terms of content. Another problem is that some measures are not publicly available, as is the case with the BNI by Janoski (2010). As a result, we cannot do justice to some of the nagging citizenship questions that are pertinent in both academic and political debates. We might begin with the following puzzle: How have citizenship policies regarding immigrants evolved? Have they become more liberal or more restrictive? And have they converged across countries?

An analysis using the first version of the *Citizenship Regime Inclusiveness Index* (CITRIX 1.0) has shown that there has been limited liberalization as well as non-significant convergence in citizenship policies until 2010. More details can be found in Schmid (2020), which embeds the analysis of citizenship policies in a broader theoretical framework of two-dimensional boundary regimes featuring both immigration and citizenship policies.

In this article, I introduce CITRIX 2.0. It improves its predecessor by expanding the dataset until 2019, refining the coding scheme of some indicators, and correcting a few coding mistakes. Following the rationale of this Special Section, CITRIX does not reinvent the wheel but instead assembles existing sets of indicators for concept specification, measurement, and data (Solano and Helbling, this Special Section). Mainly anchored in selected and partly refined indicators that feature in MIPEX, CITRIX covers four essential policy components that pertain to the acquisition of citizenship by immigrants and their children: conditions concerning (1) birthright; (2) residence; (3) renunciation; and (4) integration. The dataset is available for 23 OECD countries across Southern and Western Europe, the Anglo-Saxon settler states as well as Japan, and covers 40 years (1980–2019). CITRIX therefore expands the citizenship measurement toolbox, particularly facilitating the hitherto limited potential for the analysis of policy change (Solano and Huddleston, this Special Section).

I argue that there are *three lessons* that CITRIX 2.0 can teach us. The first lesson and main focus of the paper concerns *index methodology*. I advance a synthetic approach in which latent variable models serve as *confirmatory dimensionality tests* of three-level concepts theorized within an ontological framework (Goertz, 2020). A robust quantitative index should not only be firmly rooted in ontology, but also statistically validated in its dimensionality. More specifically, the second-level constituent parts of a one-dimensional concept theorizing an additive structure among these parts should be strongly and positively intercorrelated and thus reducible to a single consistent statistical dimension. Showing how this synthetic approach can be applied, CITRIX advances the 'conversation on methodology' (Goodman, 2015, p. 1909) in the field of migration-related policy indicators.

The second lesson of CITRIX concerns the aggregate trend of *stagnated liberalization* in citizenship policy inclusiveness over time. This trend unfolds in *three phases*. The first phase is a cycle of initial liberalization until 1992 and a first restrictive turn until 1999. This first restrictive turn is an *integrationist turn*, as it is mostly caused by the tightening of integration conditions. The second phase is a rapid liberalization until a peak in 2003 and a second restrictive turn until 2006. This second restrictive turn has been noted in much of the literature (e.g. Joppke, 2008) and is also mainly caused by a restrictive trajectory in integration conditions; it marks the *second integrationist turn*. The third phase is *stagnation* and fluctuation until 2019, ending up at a level lower than the 2003 peak. This pattern is produced by a continuing restrictive trend in integration conditions that is offset by a liberalizing trend in other conditions.

The third lesson of CITRIX concerns the *long-term convergence* in citizenship policy inclusiveness over time. This tendency also unfolds in *three phases: early convergence* until 2000, *intermediate divergence* until 2010, and *late convergence* until 2019. Many quantitative analyses so far show non-convergence or very limited convergence (e.g. Koopmans, Michalowski and Waibel, 2012; Schmid, 2020). I demonstrate in this article that substantial convergence only comes into view with a prolonged window of analysis. Overall, my analysis shows that liberalization is more circumscribed, and convergence more noticeable, than often assumed.

2. Why another citizenship policy index?

Why do we need yet another citizenship policy index? The extant literature gives us some important hints. Providing an overview of the state of art, researchers from the IMPALA project – an undertaking that seeks to collect migration-related policy data – come to the conclusion that 'disagreement remains over which are the best indicators of naturalization policies' (Gest, Boucher, Challen et al., 2014, p. 264). However, empirical analyses show that, despite conceptual differences, most of the existing indices are positively correlated to a high degree (Helbling, 2013). Helbling (2013, p. 569) therefore concludes that '[i]nstead of building yet another index, it would [. . .] be better to expand the existing ones'.

Following this advice, the goal in this section is to survey existing indicators and to identify a dataset suitable for expansion. I start with the *Barrier to Nationality Index* (BNI), which was introduced by Janoski (2010). It covers 18 OECD countries from 1960 to 2005. Another is the index that can be derived from the indicators of Fitzgerald et al. (2014). It covers 18 OECD countries from 1980 to 2010. The data collected by Peters and Shin also includes an indicator measuring citizenship policy (Peters, 2017; Shin, 2017, 2019). Their data covers a total of 29 democratic as well as autocratic countries, extending back into the 18th century in some cases. Finally, the DEMIG database records migration policy changes that also cover the area of access to citizenship for immigrants across 45 various countries around the globe in the period from 1945 to 2014 (de Haas, Natter and Vezzoli, 2015). These datasets have significant limitations. Besides not being available online, the BNI (Janoski, 2010) is complex and not transparent in its construction. Conversely, the data by Fitzgerald et al. (2014) are narrow in indicator

selection and crude in measurement. The dataset by Peters (2017) and Shin (2017, 2019) has a flexible but composite coding scheme and citizenship policy is only one among a broader set of indicators intended to measure a more comprehensive concept. Lastly, DEMIG is not suitable to quantify the relative levels of citizenship policy inclusiveness because it focuses on policy change (Haas et al., 2015).

Other indices such as the *Citizenship Policy Index* (CPI; Howard, 2009) or the *Indicators for Citizenship Rights of Immigrants* (ICRI; Koopmans et al., 2012) may be better concerning their conceptualization and measurement, but they provide only a relatively low spatio-temporal coverage that could be used as a starting point. Finally, the CITLAW[1.] indicators from the GLOBALCIT Observatory (2017, 2019) offer a comprehensive, fine-grained, and transparent conceptualization and measurement. However, it would be very demanding for a single researcher to expand them beyond the currently available cross-sections covering 2011 and 2016 to a large set of observations extending several decades back in time. I conclude that it would be useful to create a new dataset that uses a broad conceptualization and covers many countries across the past decades. The same conclusion motivated CITRIX in its first version (Schmid, 2020).

While CITRIX was being developed, others have also found it necessary to produce new datasets. For instance, for their study of far-right party influence on citizenship policies, Hansen and Clemens (2019) cover: (1) a three-point indicator for the strength of *ius soli*; (2) the residence duration requirement for ordinary naturalization, for spousal transfer, and the duration of marriage for the latter; and (3) a three-point indicator for the toleration of multiple citizenship. The data spans 29 European countries from 2003 to 2014. The main limitation here is that the data only covers this century, and that integration conditions such as language tests are not considered.

Graeber (2020) has also developed a novel dataset to investigate trends and convergence. It is based on a comprehensive and systematic theorization, rooted in an encompassing reassessment of the literature. Graeber covers: (1) the residence duration requirement; (2) a three-point[2.] indicator for the toleration of multiple citizenship; (3) a three-point indicator for the strength of *ius soli;* (4) a dummy indicating whether there is privileged access for co-ethnics; (5) a four-point indicator for language tests; (6) a three-point indicator for economic requirements; (7) a three-point indicator for citizenship tests; (8) a three-point indicator for criminal record conditions; and (9) a three-point indicator for the ease of spousal transfer. The data includes 16 European states from 1970 to 2017. The only clear limitation I can identify here is the restriction to Western Europe.

Developed in parallel, CITRIX provides an alternative to Graeber (2020). Applying a more pragmatic approach and following the plea of Helbling (2013) to build on existing data, I identify MIPEX as a broad and solid basis for refinement and expansion. MIPEX has a straightforward and transparent coding scheme, is readily available, and has far-reaching coverage across a maximum of 52 countries from 2007 to 2019 (the number of countries has increased over time and some indicators have been modified; Solano and Huddleston, 2020). An early version of MIPEX has been shown that it is reliable as a general scale (Ruedin, 2011). The various dimensions of MIPEX have also been found to be reliable, but 'in most instances the scales could be improved by removing specific items' (Ruedin, 2011, p. 2). Considering this finding, and in light of the conceptualizations in extant indices, CITRIX reduces, regroups, and – where useful – refines the MIPEX indicators covering access to citizenship.

3. Citizenship Regime Inclusiveness: concept specification and content validity

The basic-level concept of CITRIX can be called *Citizenship Regime Inclusiveness* (CRI). Policymakers define inclusiveness by establishing legal obstacles that stand between immigrants and the legal status of full membership. Greater inclusiveness is thus understood here as implying fewer obstacles and not as a feature making political systems more or less democratic (cf. Blatter, Blättler and Schmid, 2015; Blatter, Schmid and Blättler 2017; Schmid, Piccoli and Arrighi, 2019, p. 699). It is useful to use the normatively charged notion of inclusiveness nevertheless because it serves as a reminder of associated democratic values and theories.

Furthermore, CRI is not about *policy effects* or *intents*. For instance, language tests can be assumed to facilitate integration, but their presence is an obstacle that immigrants have to overcome on their way to a new passport. Regardless of their effects on *de facto* inclusion, and independent of whether more or less inclusion or integration was the intent behind the policy, tests are more exclusive than no tests. This contrasts with existing research on civic integration policies that considers the meaning of these policies – in terms of intended effects – also in a qualitative way (Goodman, 2014). I appreciate this additional dimension of analysis, but it is indeed additional. Intents and effects should not be conflated with legal obstacles as such.

Implementation and *policy outcomes* such as naturalization rates are also not considered. CRI focuses on *policy outputs*, that is, on laws as such. Other scholars also argue that this distinction is crucial and should be maintained (e.g. Gest et al., 2014; Janoski, 2010; see also Helbling, 2013). While combining outputs with implementation and outcomes is useful to get a complete picture for a normative evaluation (see Blatter et al., 2017), for empirical purposes, and especially for causal analyses, the two should not be conflated.

The main challenge of concept specification is to identify all relevant attributes of the basic-level concept, while avoiding both minimalism and maximalism (Munck and Verkuilen, 2002). I argue that the basic-level concept of CRI is constituted by four second-level policy components that regulate the access to citizenship for immigrants. The first policy component defining CRI defines the strength of *ius soli*, which refers to *birthright conditions* that regulate how easy it is for children of immigrants to obtain citizenship by being born on the territory of a receiving state. The other policy components defining CRI concern the group of

'ordinary' first-generation immigrants and their naturalization: *residence conditions* refer to requirements regarding the duration of stay, *renunciation conditions* refers to the degree to which states tolerate multiple citizenship, and *integration conditions* refers to immigrant performance in terms of language tests, citizenship tests, criminal record requirements, and economic requirements.

In selecting policy components measuring ordinary naturalization, I was informed by the theoretical framework underlying CITLAW. It is based on the most systematic conceptualization of modes of acquisition and loss of citizenship (Jeffers, Honohan and Bauböck, 2017). The CITLAW indicators measuring ordinary naturalization cover residence conditions, renunciation conditions, as well as language tests, citizenship tests, economic requirements, and criminal record requirements. CITRIX groups the latter indicators as integration conditions. I do the same because it creates a better conceptual balance on the second level of the concept.

While dropping one of these policy components would create an imbalance and a tendency towards minimalism, considering further features would put CITRIX on a slippery slope towards maximalism. One could consider spousal transfers where the immigrant marrying a citizen can get a passport more quickly. This has been done, among others, by Howard (2009), Hansen and Clemens (2019), and Graeber (2020). But then it is unclear why we should not also consider the special requirements that are often made for refugees, or those that are made in some countries for investors (Džankić, 2019). This is why I exclude such modes of acquisition, which are defined as 'special' by CITLAW (Jeffers et al., 2017).

A comparison of the coverage of the existing indices further demonstrates that CITRIX provides a balanced option to measure citizenship policies across numerous OECD countries for recent decades (see Table 1). Its substantive coverage is situated in between the most elaborate indices, namely, MIPEX 2015, CITLAW, and Graeber (2020), and those that are more reductionist, such as CPI, Fitzgerald et al. (2014), and Hansen and Clemens (2019). Furthermore, CITRIX covers both European and non-European states (the USA, Canada, Australia, New Zealand, and Japan) – a decision that I justify below. Finally, by starting in 1980, CITRIX expands the horizon beyond the 'second epoch' (Cornelius and Rosenblum, 2005, p. 99) of international migration after the Cold War.

4. Measurement and data

In this section, I do not discuss the details of measurement, but instead highlight and justify the most important modifications that CITRIX makes to MIPEX 2015 (MIPEX 2020 was developed at the same time as CITRIX 2.0 and is more similar). This is to show the added value of CITRIX. The detailed coding schemes are described in Appendix A.

MIPEX generally uses a three-point ordinal scheme (0–50–100) to measure its indicators. 100 represents the most inclusive legal situation. This is a useful simplifying device for laws that can be quite complex, but sometimes this means that relevant complexities cannot be captured as different legal aspects get reduced to the same static frame. An example is the measurement of birthright conditions for second-generation immigrants. In the MIPEX scale, unconditional and conditional *ius soli* are not distinguished. This is a crucial policy distinction. In today's mobile world, it matters whether any children born on the territory get citizenship or whether this birthright is conditional upon parents' residence in the state that confers citizenship. We would miss these relevant policy changes from unconditional to conditional *ius soli* that have happened in various instances (e.g. Ireland and New Zealand in the 2000s). Going into greater detail than most measures, CITRIX thus records a four-point scale for first-generation immigrants and expands its measurement to second-generation immigrants in an additional indicator.

The second instance in which MIPEX unnecessarily reduces complexity is in coding residence conditions. Specifically, the residence duration requirement is a number of years, and any categorization of these years into an ordinal scale is arbitrary. CITRIX records the exact number of years and then normalizes the data by linearly re-scaling the range of variation to an interval from 0 to 100.0 reflects an empirical minimum observed in Germany 1987–99 and Luxembourg 1980–85 (15 years required), and 100 reflects the theoretical maximum of zero years required. The most inclusive case is a two-years requirement in Australia 1984–2006, which yields a maximum empirical score of 86.67 on this indicator. This scaling might be counter-intuitive at first, but it serves to harmonize the indicators combining theoretical maxima with empirical minima.

Regarding renunciation conditions, the MIPEX indicators instead seem overly complex. CITRIX combines and recategorizes two three-point MIPEX scales by clearly discriminating major from minor exceptions of all kind. The resulting single three-point scale goes into much detail in the coding scheme, but the logic is straightforward: the impossibility to renounce citizenship and the cost to do so are matters that are not in the power of destination countries. Hence, these two aspects should constitute minor exemptions that almost any democratic country would seem to be inclined to make (most indeed do). Refugeehood as well as holding a citizenship of certain countries should count as other minor exceptions (and many democracies also do that). However, if the latter are combined, we can speak of major exceptions. Therefore, we can distinguish (1) minor exceptions from (2) major exceptions from (3) no renunciation requirements in any case.

The three-point MIPEX scale of language tests suffers from two problems. The first is that an easy test is equated with no requirement. The second is that a general informal requirement is not recorded. While CITRIX 1.0 used the MIPEX scale, CITRIX 2.0 creates a four-point scale with no requirement as is maximum. The second most inclusive category is an easy test or an informal general requirement. The bottom categories are the same as in MIPEX, the minimum being a test on the B1 level or higher. The MIPEX scale for citizenship tests correctly records no test or

Table 1. Overview of immigration-centric citizenship policy indicators

Index	CPI	MIPEX	BNI	ICRI	CITLAW	Fitzgerald et al.	Peters/Shin	Clemens/Hansen	Graeber	CITRIX 2.0
Year published	2009	2015/2020	2010	2012/2017	2013/2017	2014	2015/2017/9	2019	2020	2020
N countries	27	38/52	18	10/29	36	20	29	29	16	23
Countries covered										
Western Europe (WE)	X	X/X	X	X/X	X	X	X	X	X	X
Eastern Europe (EE)	(X)	X/X		--/X	X		X	X		
Western settler states		X/X	X	--/X		X	X			X
Other democracies		X/X		--/X			X			X (Japan)
Autocracies		--/X		--/X			X			
Panel data		X/X	X			X	X	X	X	X
Years covered										
Before 1945							X (some countries)			
Before 1980			1960-				X		1970-	
1980s	Year varies (WE)		X	1980/--		1980-	X		X	1980
1990s			X	1990/--		X	X		X	X
2000s	2008 (also EE)	2007/2007-	2005	2002/-- 2008/2008		X	X	2003-	X	X
2010s		2015/2019			2011 2016	2014	2010	2014	2017	2019
Content										
Residence	X	X/X	X	X	X	X		X	X	X
Permanent residence		X/--			X					
Renunciation	X	X/X	X	X	X	X		X	X	X
Birthright	X	X/X	X	X	X	X		X	X	X
Citizenship test	X (only 2008)	X/X		X	X				X	X
Language test	X (only 2008)	X/X	X	X	X	X			X	X
Economic conditions		X/X		X	X				X	X
Criminal record		X/X	X		X				X	X
Other		X/--	X	X	X			X	X	
Special features	Incorporates naturalization rates				Also covers provisions for loss and emigrants		Single indicator for overall inclusiveness		Co-ethnics covered	
Dimensionality test		X			X		Latent variable used to measure broader concept	Latent variable used to aggregate	X	X

voluntary access to information about citizenship as maximum inclusion. But it does not record a general informal requirement for civic knowledge. I add this possibility in CITRIX 2.0 as the second most inclusive and thus expand the scale to four points.

CITRIX 2.0 covers 23 OECD countries from 1980 to 2019. This includes the EU member states forming the EU-15, Norway, Switzerland, Iceland, and Japan, as well as the classical Anglo-Saxon settler states – the United States, Canada, Australia, and New Zealand. The sample therefore encompasses 920 country-year observations. The focus on these countries – and therefore the reduction of country coverage compared to MIPEX – is analytically useful because the broad societal context for regulating citizenship across these countries and years is sufficiently uniform to enable robust comparison across the period observed. More specifically, these are the countries in the MIPEX sample that have been *independent high-income democracies* that are *attractive for immigrants* and have an *effective state apparatus* to implement policy outputs *from 1980 onwards*. CITRIX is, therefore, deliberately immigration-centric and focused on the Western-democratic world.

For data collection, the main reference point is MIPEX, especially the more similar latest version (Solano and Huddleston, 2020).[3.] I first checked these codes and filled in the blanks where the CITRIX coding scheme requires additional information. For this purpose, I used the following sources: CITLAW (GLOBALCIT Observatory, 2017), DEMIG (Haas et al., 2015), ICRI (Koopmans et al., 2012), Howard (2009), Goodman (2014), and the Global Database on Modes of Acquisition of Citizenship[4.] as well as the Global Nationality Laws Database[5.] from the GLOBALCIT Observatory. I used these resources in an iterative and circular rather than in a linear way, cross-referencing and validating various codes in series of steps that has varied across countries and indicators. For the residence duration requirement, I relied on the indicators by Fitzgerald et al. (2014). They cover this information for 18 countries. I used the same sources as listed above to check and complete this data.

I then drew on the coding of Stadlmair (2017) as a first step to go back in time.[6.] Using the original MIPEX 2015 coding scheme, Stadlmair covers all indicators regarding citizenship for nine EU member states from 1995 to 2014. I again checked the data against the sources listed above and refined the coding where CITRIX differs.

The last and most laborious step was to use the main sources indicated above to complete the dataset for all other country-years. The main strategy was to check and adjust MIPEX and then use DEMIG to identify policy changes in the past and, if available, the substance of these changes. If the substance was unclear, I again used the various sources indicated above. This was again an iterative and circular rather than a linear process, with most resulting codes relying on more than one source.

5. Index methodology and aggregation

When we aggregate indicators, we should do so based on a sound specification of the structure of the concept we aim to capture with an aggregate measure. This point has been most forcefully argued by Goertz (2020). Goertz insists that concepts are about ontology and proposes a three-level approach. To conceptualize is to define what a concept means is at its basic level, what dimensions constitute the concept at its second level, and what indicators measure these dimensions at the third level. This concept structure is translated into aggregation rules by moving back up this three-level structure by determining how indicators relate to each other ontologically in constituting dimensions, and how dimensions relate to each other to yield measures of the basic-level concept.

The ontological approach has an affinity to qualitative and set-theoretical thinking. In the quantitative measurement literature, 'ontological indicators' have also been called 'formative' – they form or 'cause' the concept (Teorell, Coppedge, Lindberg and Skaaning, 2019). By contrast, 'reflective indicators' are 'symptoms' of a concept – the concept causes the observable indicators (Bollen, 1989). The latter view has a greater affinity to statistical methods. It uses latent variable models that assign indicators to dimensions based on their empirical intercorrelations rather than ontological properties. If the intercorrelation of indicators is very high, they are assumed to reflect the same dimension. Ontology still matters here, or at least it should. If the approach is *confirmatory*, ontological considerations matter both in selecting the indicators and in evaluating the results. If the approach is *exploratory*, ontological considerations matter in deciding the number of dimensions to be extracted and, relatedly, in assigning meaning to these dimensions.

Latent variables are sometimes used as aggregate measures. Most commonly, the score of cases on the latent variable is determined by a regression equation. Indicator values are combined with an additive model and weighted by the degree to which indicators 'load' on the latent variable. I argue that we should not outsource aggregation to latent variable models. This would put the 'statistical cart before the theoretical horse' (Munck and Verkuilen, 2002, p. 23).[7.] The specification of aggregation and weighting should follow instead from the ontological concept structure. Within a three-level approach, this applies most clearly to third-level indicators, which are best combined into second-level components using a purely ontological or formative logic (Goertz, 2020).

But latent variable models should still have a role to play. If the second-level components of concepts are theorized as one-dimensional and additive, latent variable models can be used to validate this concept structure. If a latent variable model tells us that one-dimensionality cannot be statistically confirmed, we should go back to the conceptualization and ask whether the basic-level concept is better understood as multi-dimensional on its second-level – if we have not done so from the outset. We can then apply multi-dimensional latent variable models to test the reformulated concept specification. If this structure is confirmed, and if theory tells us that it can be combined to reflect a higher-order concept, we must determine how these separate dimensions

are ontologically related and specify aggregation accordingly. Latent variable models cannot tell us how to combine multiple dimensions.

In sum, I propose that to construct robust quantitative policy indices it is best to use latent variable models as *confirmatory dimensionality tests* of deductively specified basic-level concepts and their second-level components. Analogous to the usual dialogue and iteration between theory and data in empirical analysis, this is to accommodate both ontological and statistical concerns. Therefore, this approach appropriately puts the statistical cart behind the theoretical horse rather than putting it in front or letting the theoretical horse run away with no statistical cart to pull at all.

While earlier immigration-centric citizenship indices such as the CPI (Howard, 2009) and the BNI (Janoski, 2010) use an ontological approach without dimensionality tests, more recent measures in the field of citizenship and integration have tended to employ latent variable models (see also Table 1). Using indicator-level data from CITLAW, Vink and Bauböck (2013) have validated a two-dimensional model of citizenship policies covering not only conditions for acquisition but also for loss. Using second-level data from CITLAW and MIPEX, Huddleston and Vink (2015) have shown that across Europe integration and citizenship policies are one-dimensional. Graeber (2020) also uses latent variable models to test his two-dimensional concept. He comes closest to my proposed approach – besides the lack of a three-level concept structure, the only aspect that is missing is a justification of the weighting scheme.

Instead of comparing my proposal to (other) existing studies at length, however, I want to mention a problematic example that shows how letting statistics override theory can lead to flawed measures. Peters (2017) uses a latent variable to measure *Immigration Policy Openness* (among them is a single indicator for citizenship). In contrast to most policies, policies regarding refugees, asylum seekers, and family reunification load negatively on the latent variable (Peters, 2017). Using this latent variable as an index therefore means that while the other policies are correctly valued, *more open borders* for refugees, asylum seekers, and family migrants count towards *more closed borders* in the resulting index – *ceteris paribus*. This obviously leads to concept-measure inconsistency. The statistical direction and the conceptual meaning of indicators do not align. This should highlight that index methodology is more than mere technical detail. It deserves greater attention than its routine relegation to appendices suggests. In the case of Hansen and Clemens (2019), the latent variable model is not even shown in their appendix and simply used as an aggregation tool without explicitly testing whether the data fits the conceptual structure.

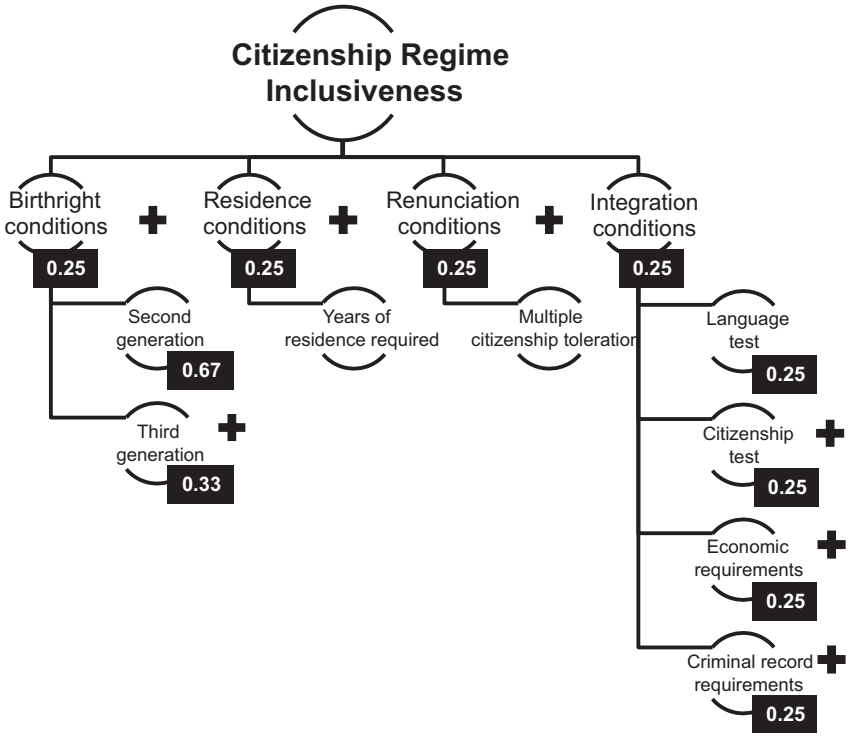
Let us see how CITRIX moves forward in addressing the challenge of aggregation (see Figure 1). First, regarding the two sub-components measuring birthright conditions for the second and third generation, we must realize if the second generation is included, there is no need for a birthright provision for the third generation. The former implies the latter. This is why in cases where a country allows second-generation immigrants to acquire citizenship unconditionally at birth, the third-generation indicator is automatically set to the maximum. Once this is done, the two indicators can be aggregated using a weighted arithmetic mean. I allot a double weight for the second-generation indicator, while the third-generation indicator receives a single weight. This is because, by significantly speeding up generational inclusion, granting automatic birthright citizenship to the second generation is considerably more liberal than allowing it only for third-generation immigrants.

Second, the four integration conditions – language tests, citizenship tests, economic requirements, and criminal record requirements – are not ontologically interwoven like the two birthright indicators. They are separate aspects demanding certain behavior or performance from immigrants. Each policy sub-component can add or remove obstacles for immigrants to pass – and adding obstacles can be plausibly compensated by removing obstacles in another sub-component. I cannot find a strong reason to argue that one is more important than the others. Following CITLAW (Jeffers et al., 2017), I argue that the integration indicators should be weighted equally and combined with an arithmetic mean to constituting the score on this policy component.

The next challenge is to determine whether and how these different second-level policy components can be aggregated to a one-dimensional statistical construct. I first consider the idea that CRI is two-dimensional: we should distinguish the conditions that make an individual *eligible* for citizenship and the conditions that discriminate further among those who are eligible based on some aspect of performance or *behavior* (e.g. Goodman, 2010; Graeber, 2020). The most prominent aspects of *eligibility conditions* in the literature are residence conditions and the birthright conditions. The most prominent aspects of *behavioral conditions* are civic integration requirements such as language and citizenship tests (e.g. Goodman, 2014). Further requirements such as economic and criminal record conditions also relate to behavior. Moreover, renunciation conditions can also be considered a behavioral condition. Actively relinquishing another citizenship has to do more with behavior than eligibility. Based on this perspective, we would separate *eligibility conditions* and *behavioral conditions*, and then would need further theory to specify how they relate to each other.

There are alternative conceptions. One is to conceive of residence and integration conditions as belonging to naturalization, and birthright and renunciation as instances of national communities expanding vertically or over generations (through birthright) and horizontally or across states (through the lack of renunciation requirements). Accordingly, Blatter et al. (2017) assign the same weight to naturalization (residence and integration) as to birthright and renunciation, respectively, positing an additive structure between them (see also Howard, 2009). Similar to my introduction of the policy components, CITLAW draws a line between birthright and ordinary naturalization. Regarding ordinary naturalization, furthermore, the CITLAW indicators weigh residence conditions as much as integration

Figure 1. Three-level concept tree and aggregation scheme of CITRIX



conditions (each 40 per cent), but renunciation conditions are given a lower weight (20 per cent). However, the justification for this decision – especially the lower weight on renunciation – is very brief and advances no clear theoretical reason beyond the assertion that residence is an especially important precondition of citizenship for ordinary immigrants (Jeffers et al., 2017).

While I understand this intuition, I advance a more generic view. Theory has told us that each of the four CITRIX components are instruments to regulate the inclusion of ordinary immigrants and their children by defining how many obstacles there are for birthright and naturalization. Each set of conditions taps into the same underlying conceptual continuum – and the policy components can be seen partial substitutes. Components can add and take away obstacles independently of the obstacles assigned by other components, and a high score on one component can compensate a low one on another. Against this background, I argue that for general purposes the most neutral and theoretically balanced option is to aggregate the CITRIX policy components using an arithmetic mean applying equal weights (Figure 1). This additive model of second-level policy components now has to undergo a dimensionality test.

Table 2. Confirmatory CATPCA extracting one dimension

Variables	**Pooled**	Cold War	1992-2001	Post 9/11	Great Recession	Post Refugee Crisis
Birthright conditions	**0.85**	0.73	0.54	0.82	0.85	0.80
Residence conditions	**0.84**	0.89	0.91	0.81	0.77	0.80
Renunciation conditions	**0.59**	0.81	0.82	0.59	0.72	0.65
Integration conditions	**0.67**	-0.62	-0.74	0.77	0.85	0.80
Eigenvalue	**2.23**	2.36	2.32	2.26	2.55	2.32
Explained variance in percent	**55.76**	59.00	58.23	56.54	63.81	58.22
Cronbach's alpha	**0.73**	0.77	0.76	0.74	0.81	0.77
N	**920**	276	230	161	138	115

Note: Principal component analysis for categorical data (CATPCA in SPSS) using the policy components of CITRIX 2.0 (values of zero replaced by 1, because zeros are counted as missing in this procedure); residence conditions defined as numeric, other policy components defined as ordinal; discretization uses ranking; variable principal normalization; entries are dimension loadings and model parameters and N country-years.

6. Dimensionality test and convergent validity

Can the various CITRIX policy components can be reduced to the same statistical dimension? Principal component analysis can answer this question. It is a type of latent variable model that tests whether various indicators measure the same statistical dimension. I use *categorical* instead of standard principal component analysis (CATPCA; Meulman and Heiser, 2011). This is because – except for the numeric residence condition – the CITRIX components are ordinal (ordered categories). CATPCA can accommodate variables that are scaled at various levels and aims to model non-linear relationships. CATPCA is still similar to standard PCA, and the output can be interpreted in the same way (Linting, Meulman, Groenen and van der Koojj, 2007).

A CATPCA extracting one dimension applied on the pooled data shows that the various CITRIX components indeed tap into the same statistical continuum (Table 2). All dimension loadings are higher than 0.5 (this indicates how well the variable is captured by the dimension) and the model parameters indicate that the resulting dimensions are reliable (Cronbach's alpha > 0.7) and explains more than 50 per cent of variation in the variables. This finding validates the statistical consistency and reliability of CITRIX 2.0 as a single composite scale combining the four policy components with an additive concept structure – CITRIX 2.0 passes the dimensionality test.

However, there is important variation over time. I split up the years from 1980 to 2019 into five historical periods: the last decade of the Cold War (1980–91), the period 1992–2001, post 9/11 (2002–08), the Great Recession after the financial crash (2009–14), and the refugee crisis and its following years (2015–19). 9/11 marks a turning point in the dimensionality of citizenship policies. Before 9/11, integration conditions load negatively on the common dimension, while the other policy components load positively. This means that immigrants faced more integration conditions in countries that had more inclusive laws regarding birthright, residence, and renunciation – and that the latter three were strongly positively correlated. This demonstrates that the most important empirical difference within citizenship policies is between integration conditions and other policies. This result could be taken as a motivation to conceptualize integration conditions as a separate dimension, as Goodman (2010) and Graeber (2020) have done.

However, after 9/11, countries started adopting more coherent citizenship regimes. Integration conditions show the same statistical tendency as policies regarding birthright, residence, and renunciation; they can be reduced to the same statistical dimension. This suggests that when introducing or modifying integration conditions during the second integrationist turn (see below) states crafted them in view of other policy components. In this way, new integration conditions have reinforced existing citizenship policies (cf. Goodman, 2014).

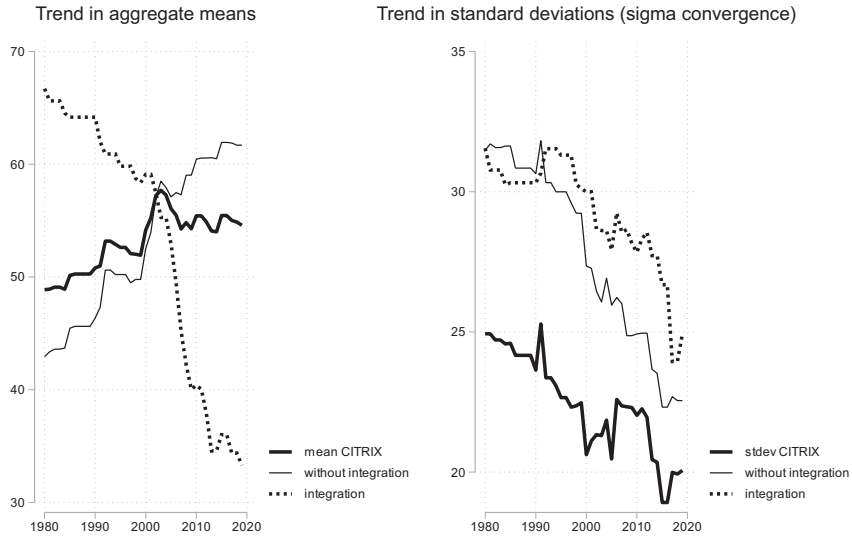
We now turn to the convergent validity of CITRIX: How strongly is it correlated with other indices? On the one hand, the aggregate CITRIX 2.0 is very highly correlated with the object scores from the pooled CATPCA (these latent variable estimates are also available in the dataset) as well as with CITRIX 1.0. Thus, the various versions of the CITRIX data and their latent variable scores have only minor differences. On the other hand, CITRIX 2.0 is highly correlated with several alternative indices (Table 3).[8] All correlation coefficients (I use Spearman's rho because the data are not numeric but ordinal) also have very low p-values. Furthermore, removing the birthright conditions from CITRIX 2.0 leads to a high correlation with the CITLAW indicators for ordinary naturalization (called ANATORD; GLOBALCIT, 2017). The birthright conditions alone also correlate positively with the respective strand of CITLAW and the CITLAW Global Birthright Indicators (called ASOL02; GLOBALCIT, 2017, 2019), but they show the lowest coefficient, presumably because of differences in aggregation (CITLAW is more complex). The average of the sub-components measuring integration testing (language and citizenship tests) is also highly correlated with the civic integration index (CIVIX) as reported in Goodman (2014). The average of the components without integration conditions yield a substantial correlation with the latent variable score employed by Hansen and Clemens (2019), but the coefficient is not as high as most others, most probably owing to conceptual differences.[9]

Table 3. Correlation of CITRIX 2.0 with other indices

Index	N	rho	p
CITRIX 2.0 CATPCA latent variable score	920	0.94	0.000
CITRIX 1.0	805	0.98	0.000
MIPEX 2015 Access to Nationality	162	0.76	0.000
MIPEX 2020 Access to Nationality	277	0.91	0.000
Fitzgerald et al. aggregated	558	0.81	0.000
ICRI Nationality Acquisition	38	0.89	0.000
Citizenship Policy Index (CPI)	30	0.85	0.000
Barrier to Nationality Index (BNI)	55	-0.72	0.000
Peters/Shin (citizenship indicator)	538	0.67	0.000
CITLAW ANATORD (without *ius soli*)	36	0.80	0.000
CITLAW ASOL02 (only *ius soli*)	36	0.55	0.000
CITLAW Birthright ASOL02 (only *ius soli*)	23	0.55	0.000
CIVIX (language and citizenship tests)	30	-0.86	0.000
Hansen and Clemens (without integration)	255	-0.61	0.000

Notes: Entries are N of overlapping observations and Spearman's rho correlation coefficients (adequate for the ordinal measurement levels) and p-values; CITRIX latent variable scores are derived from the CATPCA of the four policy components (Table 2, pooled); CITRIX 1.0 as specified in Schmid (2020); Fitzgerald et al. (2014) indicators aggregated with unweighted arithmetic mean after normalization; ICRI are from Koopmans et al. (2012); CPI from Howard (2009); BNI from Janoski (2010: 40); Peters/Shin from Peters (2017) and Shin (2017, 2019); CITLAW from GLOBALCIT (2017, 2019); CIVIX from Goodman (2014) is compared with the equivalent CITRIX mean of language and citizenship tests; the measure from Hansen and Clemens (2019) is the latent variable score used in their article and is compared with the equivalent CITRIX mean without integration conditions.

Figure 2. Trends and convergence



Nonetheless, these tests demonstrate the convergent validity of CITRIX 2.0. The high correlations show that it taps into the same statistical continuum as alternative indicators.

Table 4. Summary statistics and trends

	Overall	Cold War	1990s	Post 9/11	Great Recession	Post Refugee Crisis
CITRIX						
Mean	**53.10**	49.82	52.99	56.12	54.68	55.08
SD	**22.16**	24.02	22.00	21.38	21.18	19.22
Min	**5**	5	8.38	10.40	8.33	8.33
Max	**90.88**	90.88	90.88	90.88	83.56	79.77
N	**920**	276	230	161	138	115
Birthright conditions						
Mean	**44.38**	40.14	44.53	45.14	48.12	48.71
SD	**36.89**	39.89	37.34	36.29	33.34	32.67
Min	**0**	0	0	0	0	0
Max	**100**	100	100	100	100	100
Residence conditions						
Mean	**55.33**	55.07	53.57	56.48	56.62	56.34
SD	**18.78**	20.11	21.11	17.69	15.58	15.20
Min	**0**	0	0	20	20	20
Max	**86.67**	86.67	86.67	86.67	80	73.33
Renunciation conditions						
Mean	**55.33**	39.49	54.13	71.74	76.09	80.43
SD	**18.78**	48.79	48.04	41.38	38.79	35.48
Min	**0**	0	0	0	0	0
Max	**100**	100	100	100	100	100
Integration conditions						
Mean	**53.30**	64.60	59.75	51.11	37.91	34.82
SD	**30.95**	29.96	30.30	28.57	27.65	24.84
Min	**0**	0	0	0	0	0
Max	**100**	100	100	100	100	100

7. Stagnated liberalization and long-term convergence

The general trend in citizenship policies regarding ordinary immigrants is liberalizing on aggregate (see Figure 2 on the left and Table 4; country trajectories are shown in Appendix B). CRI is higher after the refugee crisis than it was during the last decade of the Cold War. Especially renunciation conditions have been liberalized. This trajectory unfolds in *three phases* that roughly align with the historical periods. The first is a cycle that is constituted by a liberalizing trend until 1992, which is then punctuated by a restrictive turn until 1999. This restrictive turn is due primarily to restrictions in integration with the exception of language tests. It thus marks the *first integrationist turn*. The second phase is marked by similar but more pronounced cycle of liberalization followed by restriction. First there is a surge in liberalization that stops in 2003, which marks the overall peak in the aggregate value of CRI. Then there is strong restriction. It is mainly due to the further introduction of integration conditions, thus marking the stronger *second integrationist turn*. The third phase is one of fluctuation and *stagnation* from 2007 onwards. This is because integration conditions continue to be tightened, while the other policy components liberalize. The liberalization is primarily driven by increasing toleration of multiple citizenship and secondarily by limited liberalization of birthright conditions. CRI reaches an aggregate level in 2019 that is similar to the level in 2008 but is lower than the 2003 peak. This is why we can speak of *stagnated liberalization* overall. This stagnation is most evident regarding residence conditions, which shows about the same level after 9/11 as in the following two periods. But the findings also show that there has been convergence in residence conditions. We turn to this aspect now.

The trends in standard deviation show citizenship policies have also become more similar over the past four decades.

This holds across the board: every policy component has become less diverse, and here integration conditions do not stand out (Table 4). This long-term convergence unfolds also in *three phases*, whose turning points are close to 9/11 and the financial crisis (Figure 2 on the right). There is *early convergence* from 1980 to 2000. This is because birthright and renunciation conditions have become more similar, while residence and integration conditions show no convergence during this period. The second phase is *intermediary divergence* from 2000 to 2010. It only comes to light when analyzing the aggregate score and cannot be attributed to specific policy components. Third, there is *late convergence* from 2010 to 2019, though the years after the refugee crisis see an uptick in divergence. However, except for residence, it is notable that the policy components continue to feature zero as the empirically observed minimum. For instance, there are still countries in 2019 that make no accommodations for birthright citizenship, neither for second nor for third-generation immigrants – namely Austria, Denmark, Iceland, Japan, Norway, and Switzerland (see the country trends in Appendix B). This also highlights the limited nature of liberalization.

The finding of a general liberalizing tendency corroborates a central diagnosis in the literature (e.g. Howard, 2009; Joppke, 2010). Unlike the first, second integrationist turn is also often noted in the literature (e.g. Joppke, 2008). Both turns appear in Graeber (2020) as well. He also finds evidence similar to the phase of intermediate divergence regarding the trend in standard deviations. However, CITRIX 2.0 shows clearer patterns of convergence, while Graeber documents differential patterns contrasting integration conditions with other policies. Overall, CITRIX 2.0 can be located between contrasting with studies that find no significant or very limited convergence (e.g. Schmid, 2020, which uses CITRIX 1.0 and stops in 2010; see also Koopmans et al., 2012) and expectations of stronger and more encompassing convergence (e.g. Joppke, 2010).

8. What we have learned and where to go from here

In this article, I have introduced the *Citizenship Regime Inclusiveness Index* in its second version: CITRIX 2.0. This panel dataset mainly builds on selected and partly modified indicators of MIPEX and covers 23 OECD countries from 1980 to 2019. CITRIX is not too complex yet attentive to relevant substantive details in its conceptualization and measurement, pragmatic yet broad in its spatio-temporal coverage, and valid in terms of content, dimensionality as well as regarding the convergence with alternative indicators.

I have argued that CITRIX can teach us *three lessons*. The first and main lesson is about *index methodology*. I have formulated a synthetic approach in which latent variable models serve as *confirmatory dimensionality tests* using the second-level components of deductively and ontologically specified three-level concepts if the components have an additive concept structure. CITRIX shows how this approach can be applied.

The two other lessons are empirical. First, the aggregate trajectory of citizenship policies from 1980 to 2019 can be summarized as *stagnated liberalization*. It can be divided into three phases: a first cycle of initial liberalization until 1992 and a subsequent restrictive turn until 1999, a second cycle of rapid liberalization until 2003 and a subsequent restrictive turn until 2006, and stagnation and fluctuation until 2019. 2003 marks the peak of aggregate liberalization. The second empirical lesson is *long-term convergence*, which also unfolds in three phases: early convergence until 2000, intermediate divergence until 2010, and late convergence until 2019. I conclude that liberalization is more limited, and convergence more pronounced, than much of the existing literature assumes.

Besides serving as a general index, CITRIX provides a toolbox that can be rearranged for various purposes. One could dispose of the birthright component to gauge policies towards first-generation immigrants. Or one could select the integration conditions to further investigate these specific policies. Since all data is available in disaggregated form, users can also change the aggregation scheme. This makes CITRIX a versatile instrument to study the important phenomenon of citizenship and its correlates. Regular updates are planned.

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Competing interests

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in the design of the study and collection, analysis, and interpretation of data and in writing this article.

Data Availability Statement

The dataset is available at https://doi.org/10.7910/DVN/XHZV8V.

Notes

1. https://globalcit.eu/citizenship-law-indicators/
2. This is my interpretation of the text. I could obtain neither the appendix nor the data from Graeber (2020), where these details are clarified.
3. I am grateful to Giacomo Solano for sharing these data.
4. https://globalcit.eu/acquisition-citizenship/
5. https://globalcit.eu/national-citizenship-laws/
6. Jeremias Stadlmair deserves my gratitude for sending me his dataset quickly upon request.
7. Note that the original context of the quote is about the problem of losing information in the process of aggregation and the statistical temptation to do so in order to get one-dimensional variables.
8. The BNI and its coding scheme are not publicly available. I used the data indicated in Janoski (2010), which leads to 55 overlapping observations with CITRIX.
9. The correlations with BNI, CIVIX and the measure of Hansen and Clemens (2019) are negative because they are oriented towards measuring higher levels of restrictions rather than inclusiveness. I want to thank Michael A. Hansen for sending me the data used in Hansen and Clemens (2019).

REFERENCES

Bauböck, R., Honohan, I., Huddleston, T., Hutcheson, D., Shaw, J. and Vink, M. P. (2013) *Access to citizenship and its impact on immigrant integration*. Florence: European University Institute.

Blatter, J., Blättler, A. and Schmid, S. D. (2015) What Happened/s to Inclusion? IPSA Political Concepts Committee on Concepts and Methods Working Paper 64.

Blatter, J., Schmid, S. D. and Blättler, A. C. (2017) 'Democratic Deficits in Europe', *Journal of Common Market Studies*, 55 (3), pp. 449–467.

Bollen, K. A. (1989) *Structural Equations with Latent Variables*. New York: Wiley.

Cornelius, W. A. and Rosenblum, M. R. (2005) 'Immigration and Politics', *Annual Review of Political Science*, 8 (1), pp. 99–119.

de Haas, H., Natter, K. and Vezzoli, S. (2015) 'Conceptualizing and Measuring Migration Policy Change', *Comparative Migration Studies*, 3 (1).

Džankić, J. (2019) *The global market for investor citizenship*. Cham: Palgrave Macmillan.

Fitzgerald, J., Leblang, D. and Teets, J. C. (2014) 'Defying the Law of Gravity', *World Politics*, 66 (3), pp. 406–445.

Gest, J., Boucher, A., Challen, S., Burgoon, B., Thielemann, E., Beine, M. et al (2014) 'Measuring and Comparing Immigration, Asylum and Naturalization Policies Across Countries', *Global Policy*, 5 (3), pp. 261–274.

GLOBALCIT (2017) *CITLAW Indicators*. San Domenico di Fiesole: European University Institute.

GLOBALCIT (2019) *Global Birthright Indicators*. San Domenico di Fiesole: European University Institute.

Goertz, G. (2020) *Social Science Concepts and Measurement*. Princeton: Princeton University Press.

Goodman, S. W. (2010) 'Integration Requirements for Integration's Sake?', *Journal of Ethnic and Migration Studies*, 36 (5), pp. 753–772.

Goodman, S. W. (2014) *Immigration and Membership politics in Western Europe*. New York: Cambridge University Press.

Goodman, S. W. (2015) 'Conceptualizing and Measuring Citizenship and Integration Policy', *Comparative Political Studies*, 48 (14), pp. 1905–1941.

Graeber, J. D. (2020) 'Quo vadis, Citizenship?', *Journal of Contemporary European Studies*, 77 (1), pp. 1–21.

Hansen, M. A. and Clemens, J. L. (2019) 'What to Expect When You're Electing', *Comparative European Politics*, 17 (5), pp. 673–695.

Helbling, M. (2013) 'Validating Integration and Citizenship Policy Indices', *Comparative European Politics*, 11 (5), pp. 555–576.

Howard, M. M. (2009) *The Politics of Citizenship in Europe*. New York: Cambridge University Press.

Huddleston, T. (2015) *Migrant Integration Policy Index 2015*. Brussels: Migration Policy Group.

Huddleston, T. and Vink, M.P. (2015) 'Full Membership or Equal Rights?', *Comparative Migration Studies*, 3 (8), pp. 1–19.

Janoski, T. (2010) *The Ironies of Citizenship*. Cambridge: Cambridge University Press.

Jeffers, K., Honohan, I. and Bauböck, R. (2017) *How to Measure the Purposes of Citizenship Laws. Version 3.0*. San Domenico di Fiesole: European University Institute.

Joppke, C. (2008) 'Comparative Citizenship', *Law & Ethics of Human Rights*, 2 (1), pp. 1–41.

Joppke, C. (2010) *Citizenship and Immigration*. Cambridge: Polity Press.

Koopmans, R., Michalowski, I. and Waibel, S. (2012) 'Citizenship Rights for Immigrants', *American Journal of Sociology*, 117 (4), pp. 1202–1245.

Linting, M., Meulman, J. J., Groenen, P. J. F. and van der Koojj, A. J. (2007) 'Nonlinear Principal Components Analysis', *Psychological Methods*, 12 (3), pp. 336–358.

Meulman, J. J. and Heiser, W. J. (2011) *SPSS Categories 20*. Chicago: SPSS.

Munck, G. L. and Verkuilen, J. (2002) 'Conceptualizing and Measuring Democracy', *Comparative Political Studies*, 35(1), 5–34.

Peters, M. E. (2017) *Trading Barriers*. Princeton: Princeton University Press.

Ruedin, D. (2011) The Reliability of MIPEX Indicators as Scales. SOM Working Papers, Paper Number 2011–03.

Schmid, S. D. (2020) 'The Architecture of National Boundary Regimes', *Comparative Migration Studies*, 8 (25), pp. 1–20.

Schmid, S. D., Piccoli, L. and Arrighi, J.-T. (2019) 'Non-universal Suffrage', *European Political Science*, 18 (4), pp. 695–713.

Shin, A. J. (2017) 'Tyrants and Migrants', *Comparative Political Studies*, 50 (1), pp. 14–40.

Shin, A. J. (2019) 'Primary Resources, Secondary Labor', *International Studies Quarterly*, 63 (4), pp. 805–818.

Solano, G. and Huddleston, T. (2020) *Migrant Integration Policy Index 2020*. Brussels: Migration Policy Group.

Stadlmair, J. (2017) 'Which Policies Matter?', *Austrian Journal of Political Science*, 46(1), pp. 59–73.

Teorell, J., Coppedge, M., Lindberg, S. and Skaaning, S.-E. (2019) 'Measuring Polyarchy Across the Globe, 1900–2017', *Studies in Comparative International Development*, 54 (1), pp. 71–95.

Vink, M. P. and Bauböck, R. (2013) 'Citizenship Configurations', *Comparative European Politics*, 11 (5), pp. 621–648.

Supporting Information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

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