

Development and Validation of Consumer Economic Nationalistic Tendencies Scale (CENTSCALE)

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Abstract

Economic nationalism has been identified as an increasingly critical component of nationalistic sentiment, influencing cognitions, attitudes, evaluation and purchase intentions. Although the literature has made a distinction between economic nationalism and other measures of national and international orientation, previous empirical studies explore the concept in a 'unified' form. As such, current scales to measure economic nationalism have also taken this unified approach, and thus cannot distinguish from a more general operationalisation of the concept. This study begins to fulfil this gap by developing a scale specifically tailored to measure two specific of economic nationalism, namely "economic conditions" and "work assurance". Scale generation, purification, validation and confirmation are achieved through four studies.

Background and Problem Development

Economic nationalism is described as the associated need with protectionism in the third world that involves discrimination in favour of one's own nation carried as a matter of policy (Macesich, 1985). The term is associated with a wide range of regulatory actions, including patent infringement, restriction of foreign investment; restriction on immigration of workers and restriction of foreign firms, through practices in the form of tariffs, quotas, and 'voluntary' restraint agreements, countervailing duties and regulatory standards barring foreign products from the domestic market (Baugh and Yaprak, 1996; Reich, 1991).

Previous studies have identified economic nationalism in terms of the readiness to support nationalist economic policy, primarily adopting an 'us first', in-group versus out-group distinction (i.e. 'domestic' versus 'foreign' companies). In this case, economic nationalism is proposed to be associated with personal job insecurity, authoritarianism, and intolerance of ambiguity (Baughn and Yaprak, 1996). Other studies have also demonstrated that the term attributed to three components namely nationalism, patriotism and internationalism (Mort and Duncan, 2003; Kosterman and Feshback, 1989). In addition, some related the term to ethnocentrism, economic discrimination and even racism (see Becker, 1957; Ouellet, 2007; Adorno *et al.*, 1960; Johnson, 1992), including the resistance to the immigration of foreign workers as well as to foreign investment; job utility, ownership of intellectual property and technological competitiveness (Macesich, 1985; Baugh and Yaprak, 1996).

The construction of a unique scale is necessary because the classic measure of economic nationalism, Baughn and Yaprak's (1996) economic nationalism scale, is not perceived as directly relevant to the study of consumer behaviour. It was not developed for that purpose and contains items (i.e. 'International patent and copyright laws should emphasize U.S. interests') unreflective of the perspective country of ownership. However, a more recent economic nationalism scale is available (see Mort and Duncan, 2003), however it also has little relevance to the study of consumer behaviour, in particular, consumer perspective of

ownership applications and the marketing phenomena. In developing a new measurement of consumer economic nationalism, these newly formed tendencies are closely associated with purchasing foreign- versus domestic-owned product in relation to the need and importance to support the interest of domestic ownership (Mort and Duncan, 2003). As a result, the apprehension for economic security and power in conjunction with the importance of nationalistic tendencies and subsequently ownership implications are the basis for the conceptualization of consumer economic nationalism (CENT) (Baughn and Yaprak, 1996; Burnell, 1986; Mort and Duncan, 2003; Reich, 1991).

Further contributions to the scale derived from theoretical bases such as realistic group conflict theory noted 'competition over scarce resources' (Jackson, 1993). Accordingly, jobs and economic benefit constitute such competed-for resources (Insko *et al.*, 1992), proposing elevations in economic nationalism as a function of "economic conditions" and "work assurance". In addition, it is suggested that economic nationalism could conceivably be stimulated by the relative increase in economic power of other nations, despite the fact that the host/home country's standard of living is increasing on an absolute scale (Baughn and Yaprak, 1996). In other words, the threat pertaining to an unfavourable economic condition (i.e. 'given the perceived threats by other countries, *Australia* should heavily support national policies') would be a direct result of a country's relative status and economic 'self-esteem' (Insko *et al.*, 1992). Accordingly, "work assurance" would involve attaching utility or value to having certain jobs or companies controlled within the home country and owned by domestic individuals rather than by foreigners (i.e. *Australians* should only deal with *Australian*-owned companies).

As economic nationalism has been implicated in these and many other related constructs, researchers need to make this distinction in order to provide more robust information about consumer behaviour appeals, nationalistic support, and uses. To achieve this, the study aims to develop a scale that operationalises on two major consumer economic nationalistic tendencies. Four studies were undertaken to generate, validate and confirm the CENTSCALE.

Methods and Results

Study One

The first step in development of the scale was to generate items that are designed to 'capture the conceptual and logical true variance presented in the construct' as per their definition (Eastman, Goldsmith and Flynn, 1999). The constructs in this case were "economic conditions" and "work assurance". DeVellis (2003) suggested that the theory surrounding the concepts we were exploring should first be consulted to aid clarity. The definitions and theories supporting each form of economic nationalistic tendency ("economic conditions" and the like) are discussed previously. As per Li, Edwards and Lee (2002) we used three methods to generate a set of potential scale items: literature reviews (Churchill, 1979), thesaurus searches (Wells, Leavitt and McConville, 1971), and experience surveys (Chen and Wells, 1999; Churchill, 1979). From these procedures we developed an initial pool of 32 items. The use of experience surveys (conducted with both academics and practitioners) would also help ensure face validity of what would be the future scales for economic nationalism. Survey forms with the initial 32 items and demographics were administered. Valid respondents received totalled 336. Exploratory factor analysis (EFA) has often been cited as a first step in scale development and item removal and was thus undertaken (DeVellis, 1991, Spector, 1992,

Sweeney, Hausknecht and Soutar, 2000). EFA revealed two factors, both of which were clearly related to CENT. The EFA process included removing items indicated as unusable in the EFA, in addition to using Cronbach’s alpha and removing items with squared multiple correlations of less than 0.30 and corrected item-to-total correlations of less than 0.50. An analysis of the items through their mean scores (as suggested by DeVellis, 2003) showed no extreme means either way (between 4.03 and 5.03 on a seven point scale). Scale length was also optimised by removing the weaker items in favour of almost identical stronger items. Finally we were left with five items relating to “economic conditions” ($\alpha = .746$) and 5 items relating to “work assurance” ($\alpha = .720$) (KMO and Bartlett’s test = .762, Approx. Chi-Square = 717.843, df. = 45, Sig. = .000).

Study Two

The aim of this study was to examine the uni-dimensionality of the scale items developed in study one and to further purify the scale items. After this stage we could also examine the items for content validity by comparing the remaining items with our working definition of the construct. As discussed, this paper was only concerned with developing a CENTSCALE. Explained working definitions of the concepts with a new survey instrument containing the 10 CENT items. Valid respondents totalled 202. Confirmatory factor analysis (CFA) was used as a means of scale reduction by showing what items may be trimmed from the scale (Netemeyer, Bearden and Sharma, 2003), and to test for uni-dimensionality (Pedhazur and Schmelkin, 1991) The CFA was again completed using AMOS 6. CFA further refined the scale resulting in five items for “economic conditions” (Chi-square = 4.9, d.f. = 5, Probability level = .427, GFI = .990, AGFI = .971, RMSEA = .000, $\alpha = .69$); and five items for “work assurance” (Chi-square = 4.9, d.f. = 5, Probability level = .429, GFI = .990, AGFI = .971, RMSEA = .000, $\alpha = .78$), both reaching acceptable results (Hu and Bentler, 1999). On face value the scale also still encompassed the character of our definition (content validity). Figure 1a and 1b shows the specific scale items for the two factors.

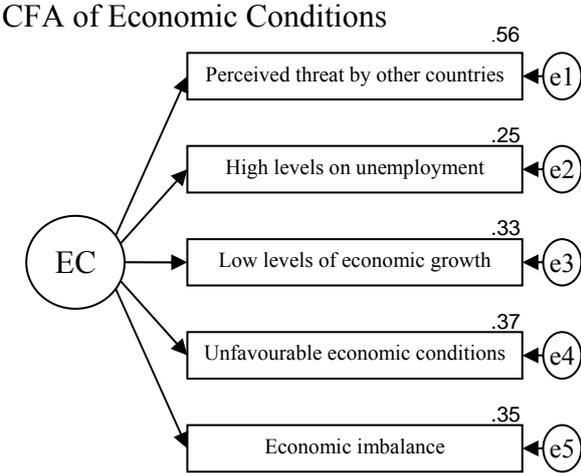


Figure 1a:

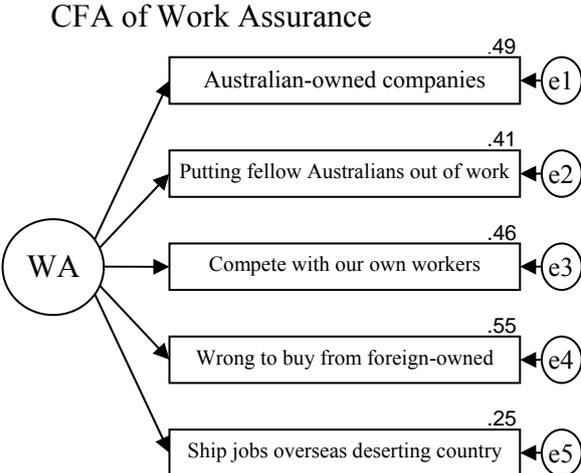


Figure 1b:

Study Three

This third study was undertaken to test construct validity, specifically convergent, discriminant, and criterion (predictive) validity. The key studies for this stage were Churchill (1979) and Eastman, Goldsmith and Flynn (1999). A new survey instrument was produced

containing the scale items in addition to an established scale to measure purchase intentions toward Australian products (Mort and Duncan, 2003). This would be of use in establishing predictive validity through median split and T-tests. The underpinning for the suitability of this process is that, as discussed earlier, previous studies have shown that an increase in CENT appeals positively affects purchase intention. Thus those people experiencing a higher level of CENT (in this case measured by our scales) should be more likely to purchase Australian products. Previously established scales namely; CETSCALE (Shimp and Sharma, 1987), consumer racism scale (Ouellet, 2007), nationalism scale (Kosterman and Feshbach, 1989), patriotism scale (Kosterman and Feshbach, 1989), internationalism scale (Kosterman and Feshbach, 1989) and openness scale (Sharma, Shimp and Shin, 1995) were included to test for validity via the use of a Pearson Correlation. As shown in previous studies the use of a Pearson correlation to show convergent and discriminant validity is a valid undertaking (Eastman, Goldsmith and Flynn, 1999). The results of the T-test confirmed predictive validity by showing a significantly more positive purchase intention toward Australian products ($P < 0.01$, $df. = 200$) in those experiencing a higher level of CENT, as tested by the developed items. The results for the Pearson Correlation are best explained in viewing Figure 2. Reliability (Cronbach's alpha) shows the continued acceptable reliability of the "economic conditions" ($\alpha = .692$) and "work assurance" ($\alpha = .783$) dimensions which contributes to the overall CENTSCALE ($\alpha = .721$). The figure shows the basic principles and rules are met.

	I.	II.	III.	IV.	V.	VI.	VII.
CENT (I)	1	.672(**)	.575(**)	.473(**)	.295(**)	-.154(*)	-.012
CET (II)	.672(**)	1	.546(**)	.390(**)	.205(**)	-.150(*)	-.146(*)
CR (III)	.575(**)	.546(**)	1	.438(**)	.247(**)	-.064	.006
NAT (IV)	.473(**)	.390(**)	.438(**)	1	.136	-.115	-.043
PAT (V)	.295(**)	.205(**)	.247(**)	.136	1	.056	.225(**)
INT (VI)	-.154(*)	-.150(*)	-.064	-.115	.056	1	.482(**)
OPEN (VII)	-.012	-.146(*)	.006	-.043	.225(**)	.482(**)	1

Figure 2 Pearson Correlation of the Various Scales

** Pearson Correlation is significant at the 0.01 level (1-tailed)..

* Pearson Correlation is significant at the 0.05 level (1-tailed).

To demonstrate the discriminant validity, CENTSCALE WAS correlated with patriotism (PAT), Internationalism (INT), and Openness Scale (OPEN); either a low or an insignificant correlation with the CENTSCALE and these scales is expected. As predicted, the Pearson correlations between the CENTSCALE and the Openness Scale (-.012), Internationalism (-.154) and Patriotism (.295). Evidence of convergent validity is demonstrated by significant correlations of the scale with measures of other constructs to which it is expected to be related (Churchill, 1979). In other words, 'measures that should be related are in reality related'. Studies have proposed that Consumer Ethnocentrism (CET) and CENT should be empirically related (Mort and Duncan, 2003). We expected a high correlation with the CENT, the Consumer Racism (CR) and the Nationalism (NAT) scales. We found the CENTSCALE to be positively correlated to each of these constructs. The Pearson correlations of .672; .575 and .473 respectively indicated that the CENTSCALE is performing as it might be expected with related constructs (Eastman, Goldsmith and Flynn, 1999).

Study Four

The purpose of this study was to increase the generalizability of the scales by performing a CFA on the ten prior validated items using a variation in sample respondents (working professionals as opposed to students). After the new survey instrument was pre-tested in a small focus group, new respondents were collected resulting in 200 useable surveys. In addition to the 10 CENT items, it also included thirty eight items for testing sociological concepts (i.e. consumer ethnocentrism). The CFA showed the suitability of the CENTSCALE under the differing conditions with acceptable results (Hu and Bentler, 1999). Five items for “economic conditions” (Chi-square = 4.096, d.f. = 5, Probability level = .536, GFI = .992, AGFI = .976, RMSEA = .000, α = .68); and five items for “work assurance” (Chi-square = 2.238, d.f. = 5, Probability level = .815, GFI = .995, AGFI = .986, RMSEA = .000, α = .79).

Conclusion

This paper has given an overview of the process undertaken in developing the CENTSCALE. The scale items were generated and purified through EFA and CFA (Study One and Two). The scale also exhibited content validity and uni-dimensionality using CFA (Study Two), convergent, discriminant and predictive (criterion) validity (Study Three), and generalizability and concurrent (criterion) validity (Study Four). CENTSCALE contributes to the literature in three ways. First, by integrating an additional construct (i.e. “economic conditions”) to the existing knowledge of economic nationalism; second, by incorporating a more ‘consumer’ or ‘marketing’ related approach in the development of scale items which has been lacking in a few studies and thirdly, by distinguishing from a more general operationalisation of economic nationalism and its allied constructs. These contributions can be used to encourage further attempts to explore other specific economic nationalistic tendencies. These studies are required for a more robust knowledge base on the construct. Although several academic maintain that economic nationalism is out of place in today’s interdependent global economy (Macesich, 1985; Reich, 1991), the continual support for such policies and similar political activities evidently reflects the need for further research. This proposes managerial initiatives in the global market place such as consumer education, consumer behaviour and marketing insinuations relating to local campaigns and ownership appeals together with the extension of the ‘owned’ by labels (Mort and Duncan, 2003) and their immediate implications.

Appendix A – Full Items of CENTSCALE

Factors for “Economic conditions”

1. Low levels of economic growth would highlight the importance of supporting national wellbeing
2. Australians should support national interests in periods of unfavorable economic conditions
3. In situations of economic imbalance, Australians should be more nationalistic
4. Given the perceived threats by other countries, Australia should heavily support national policies
5. High levels of unemployment would create a need to support local jobs

Factors for “Work Assurance”

1. Australian companies that ship jobs overseas are deserting their country
2. Australians should only deal with Australian-owned companies

3. Australian consumers who purchase products made in other countries are responsible for putting their fellow Australians out of work;
4. Foreigners should not be permitted to come into Australia if they compete with our own workers
5. It is wrong to buy from foreign-owned companies because it causes Australian-owned companies to go out of business

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