

Bogliaccini, J., & Madariaga, A. (2020). Varieties of Skills Profiles in Latin America: A Reassessment of the Hierarchical Model of Capitalism. *Journal of Latin American Studies*, 52(3), 601-631. doi:10.1017/S0022216X20000322

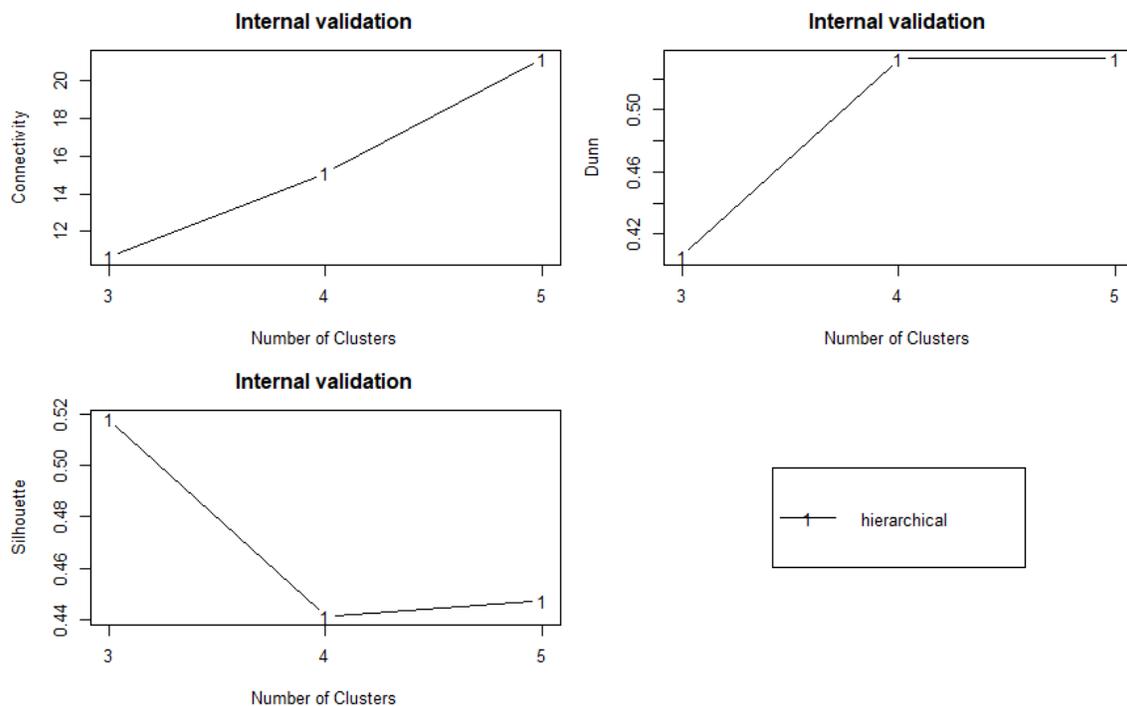
Online Appendix A

Cluster analysis

We use Agglomerative Hierarchical Clustering method as we conceive groups to be potentially nested, therefore opening the possibility for the existence of sub-clusters. We use a prototype-based approach in which clusters are represented by centroids, using Ward's (1963) agglomeration methods in order to minimize the sum of the squared distances of points from their cluster centroids. We have also defined a matrix of Euclidean distances.

Validation

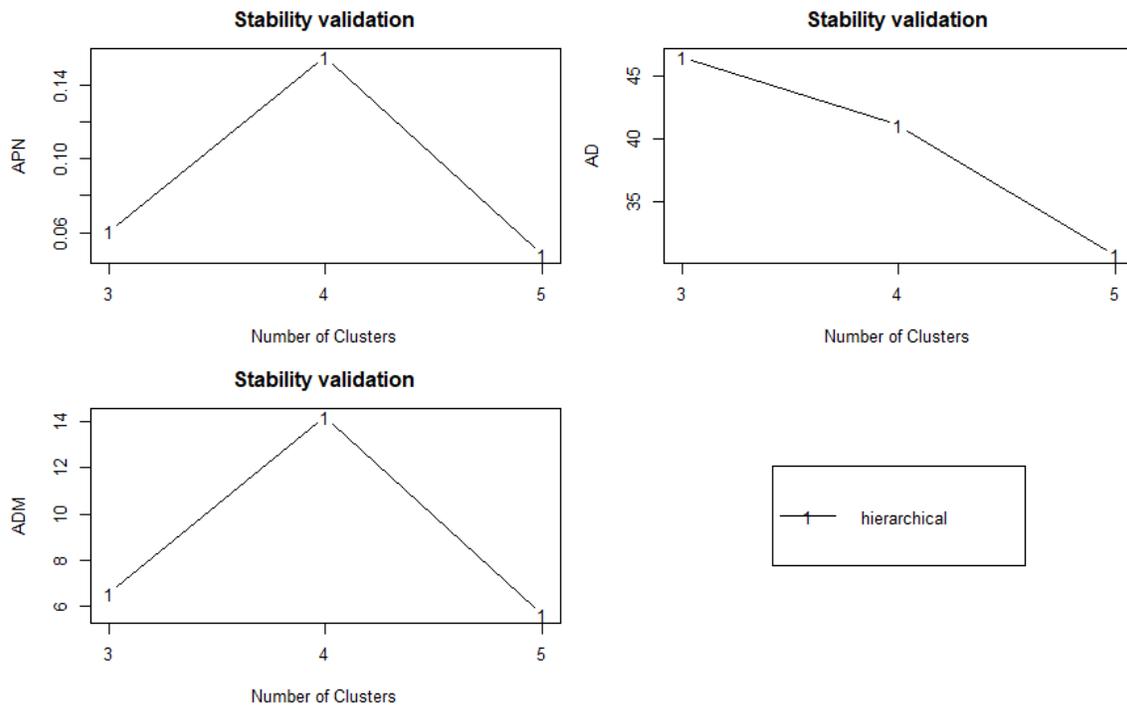
Figure A1. *Internal validation*



Source: Authors' elaboration

Note: For assessing internal validation, we use three measures that reflect the compactness, connectedness, and separation of the cluster partitions: Connectivity, Dunn Index and Silhouette Width. Connectivity $[0, \infty]$ should be minimized, Silhouette Width $([-1; 1])$ and Dunn Index $([0, \infty])$ should be maximized. See Julia Handl, Joshua Knowles, and Douglass B. Kell, 'Computational cluster validation in post-genomic data analysis', *Bioinformatics*, 21: 15 (2005), pp. 3201-12.

Figure A2. Stability validation



Source: Authors' elaboration

Note: Three stability measures are used to compare the results from clustering based on the full data to clustering based on removing each column, one at a time: a measure of average proportion of non-overlap (APN), a measure of the average distance (AD) and a measure of the average distances between means (ADM). K.Y. Yeung, D.R. Haynor and W.L. Ruzzo, 'Validating clustering for gene expression data', *Bioinformatics*, 17: 4 (2001), pp. 309-18.

Table A1. Validation measures aggregation rank

Rank	Option
1	hierarchical-5
2	hierarchical-3
3	hierarchical-4

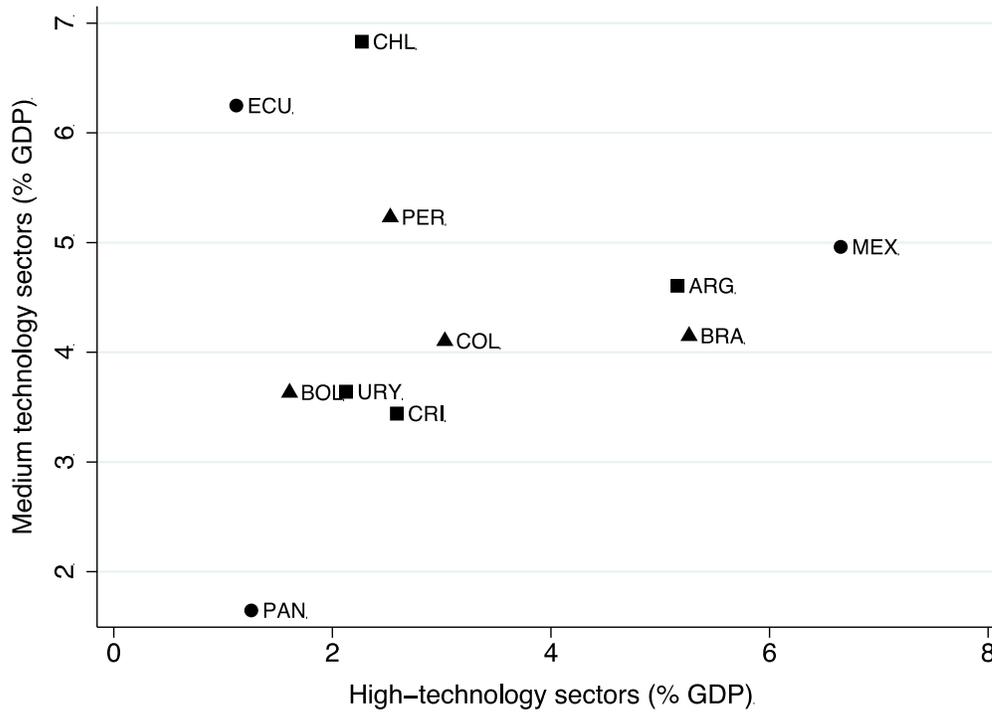
Algorithm: CE, Distance: Spearman. Score: 1.22

Source: Authors' elaboration

Note: Rank aggregation measure (Pihur et al. 2007); uses the default cross-entropy method with weighted Spearman's foot-rule to order results.

Online Appendix B

Figure B1. *Value added in medium and high-technology manufacturing sectors in Latin America*



Source: Author's elaboration based on data from UNIDO and ECLAC.

Note: Medium includes fuels, non-metallic minerals, basic metals and mining; High includes chemicals, machinery, electronics and transport.

Figure B2. *Employment in medium and high-technology sectors in Latin America*



Source: Author's elaboration based on data from UNIDO and ECLAC.

Note: Medium includes fuels, non-metallic minerals, basic metals and mining; High includes chemicals, machinery, electronics and transport.