



# OECD Mining Regions: building a network to enhance productivity and well-being

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Antofagasta - Chile



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# The Experience of Entrepreneurship and Venture Capital in Peripheral Mining Regions: The Case of Antofagasta

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# Agenda

- An overview on resource peripheries characteristics
- The Case of Antofagasta as a resource periphery:
  - The entrepreneurial activity
  - The access to funding
  - The entrepreneurs with high growth potential
  - The empirical evidence: HNWI's willingness to become angel investors
- Conclusion

## An overview on resource peripheries characteristics

- Resource peripheries are regions integrated into global production networks but strongly dependent on the exploitation of natural resources (Hayter, Barnes and Bradshaw, 2003).
- Traditionally the peripheral regions are subject to high instability due to boom-bust cycles at the mercy of global commodity prices.
- In these regions the source of capital investment predominantly comes from outside, namely FDI made by multinational companies.

## An overview on resource peripheries characteristics

- The contribution of the national banking system to the development of entrepreneurship and diversification is also limited due to the high level of instability of these regions.
- In general, access to capital funds is spatially uneven and funding gaps are more severe in these regions.

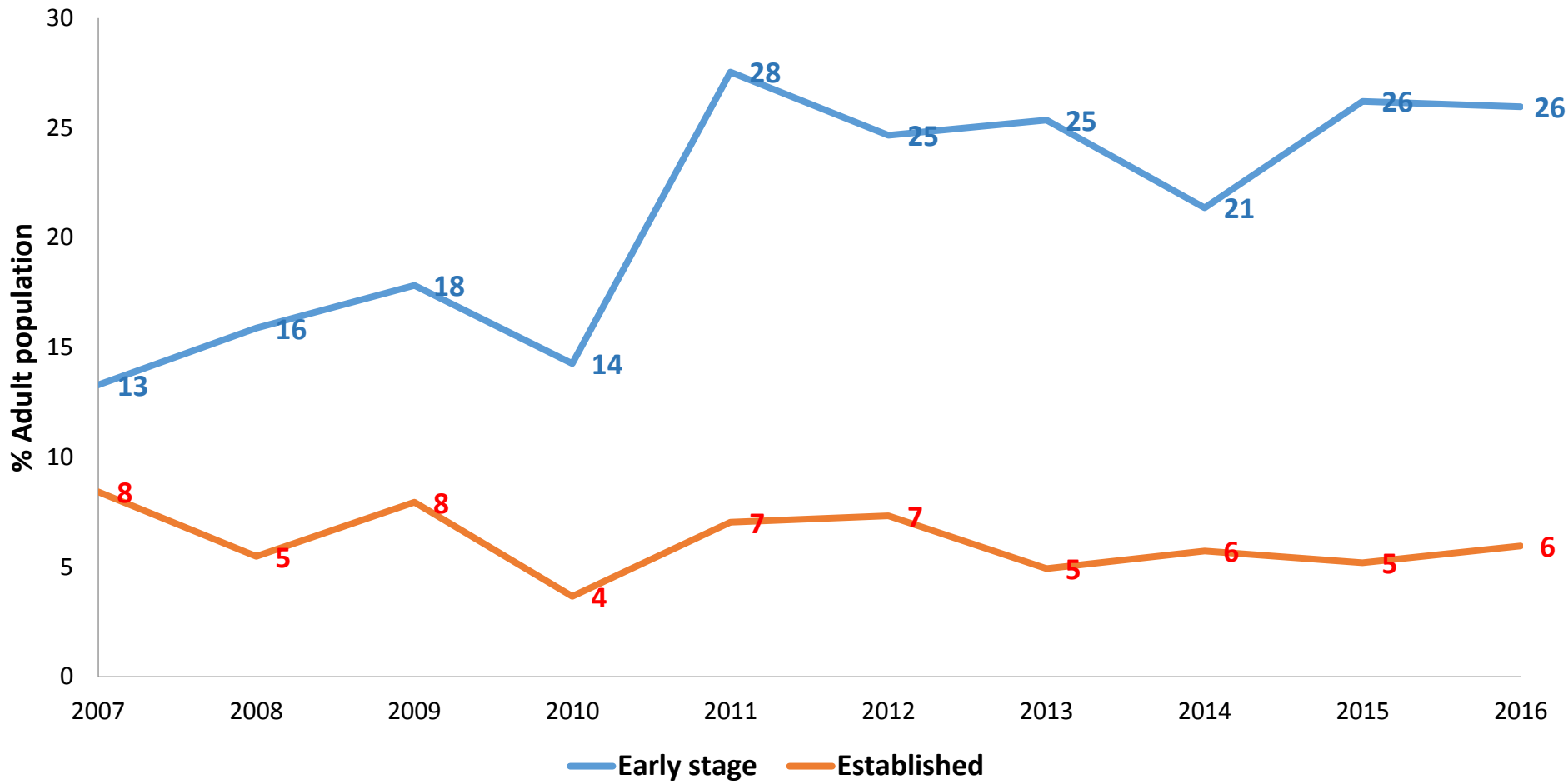
## Mining resource peripheries characteristics

- There is a negative relationship between extractive activities and the rate of entrepreneurship due to the large size of multinational companies (Glaeser, Kerr and Kerr, 2015; Stuetzer et al., 2016).
- These regions tend to have a low entry of firms while the number of exiting ones is normally high and they tend to reinforce the level of specialization.
- The characteristics of the local labor markets also negatively affect the propensity of people becoming entrepreneurs.

## Mining resource peripheries characteristics

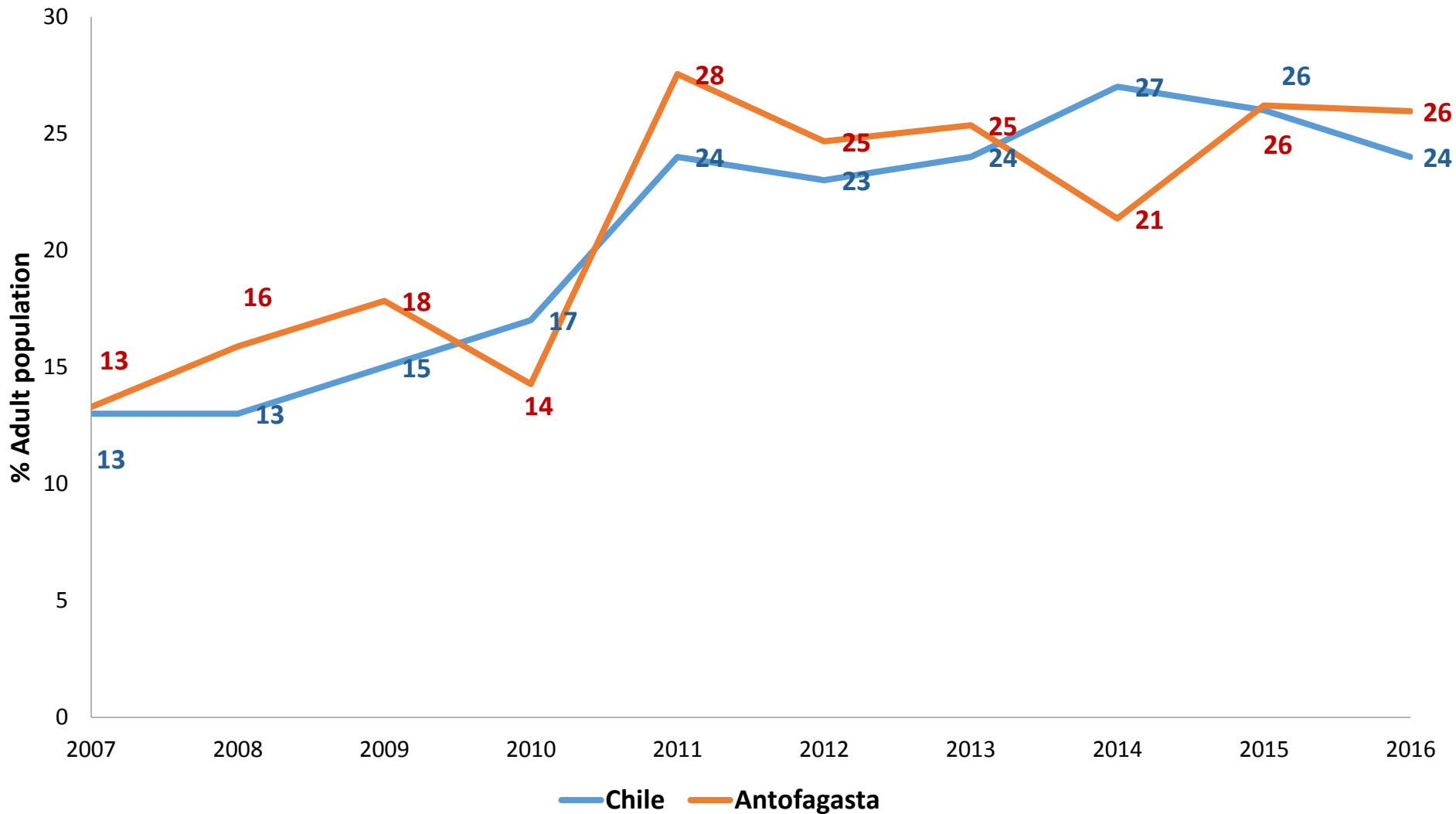
- The use of long distance commuting by mining companies (Aroca and Atienza, 2011).
- The regional innovation systems are organisationally thin (Isaksen, 2015), where clusters are non-existent or weakly developed; there is a low level of R&D; the innovation is fundamentally incremental and is process innovation; and networks and knowledge transfer are scarce and limited (Tödtling and Trippl, 2005).

# Entrepreneurial Activity in Antofagasta Region

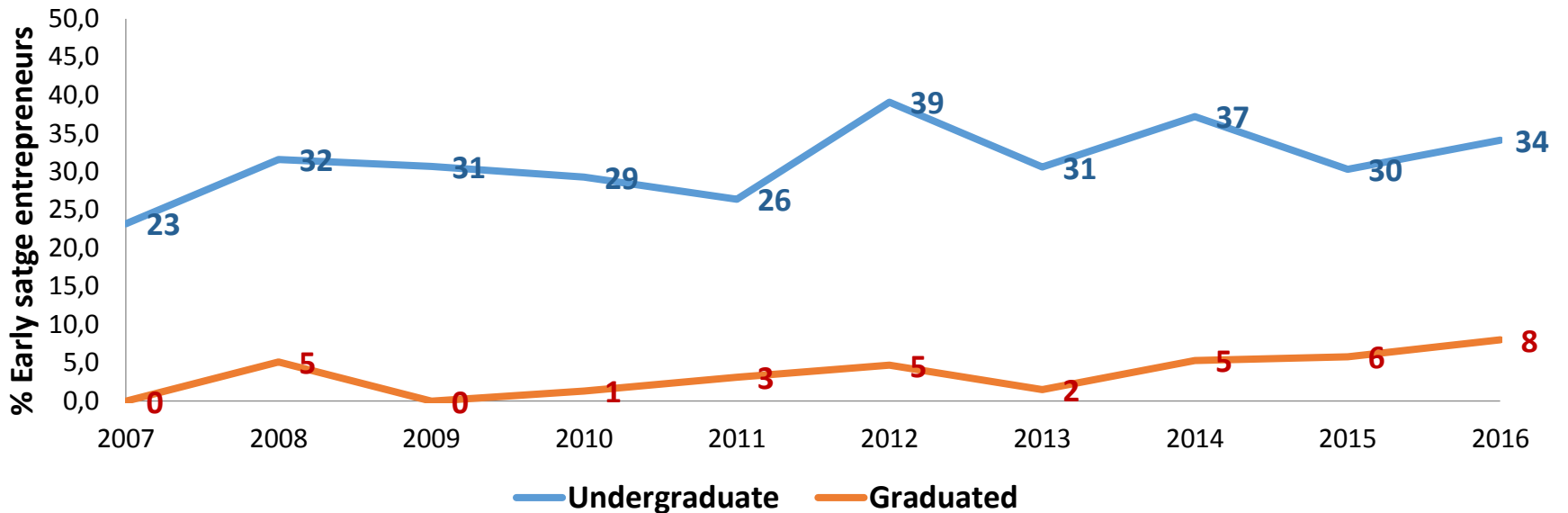
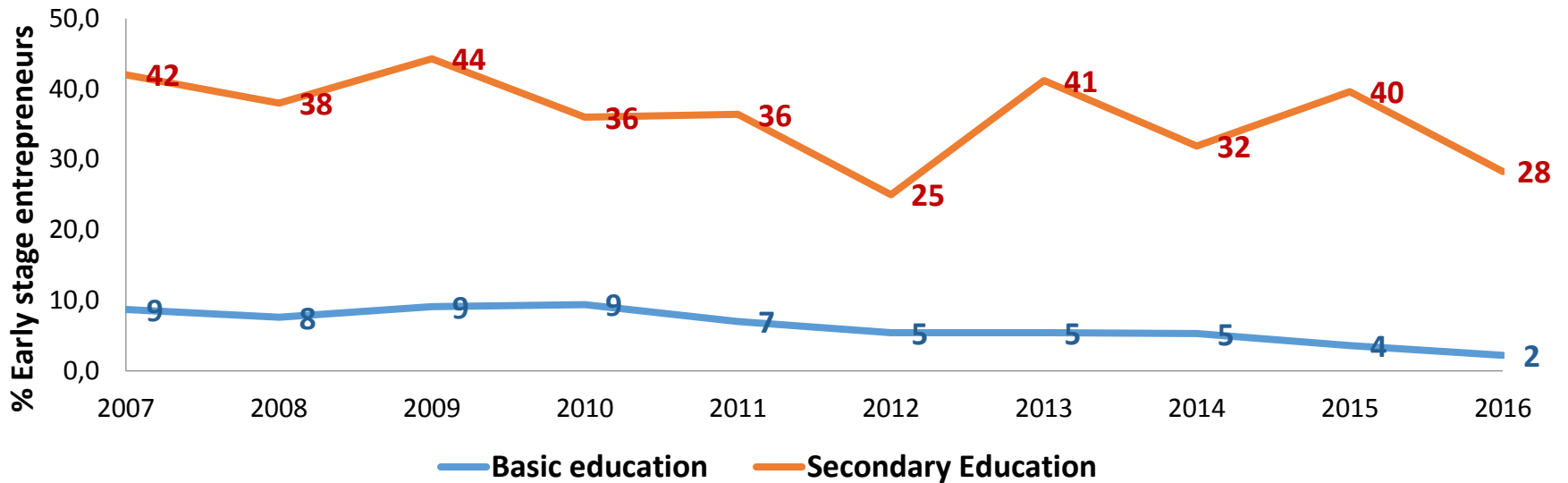




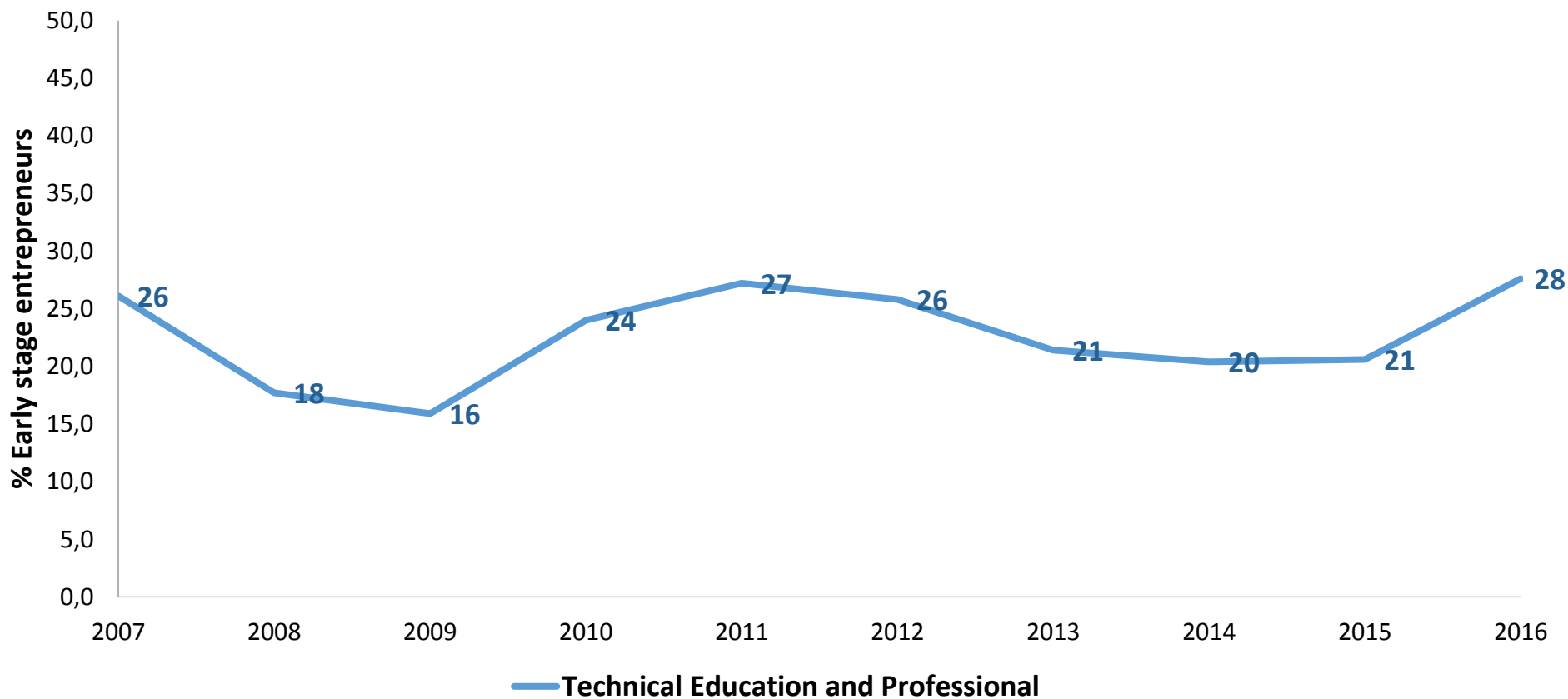
# Early-stage entrepreneurial activity in Chile and Antofagasta Region



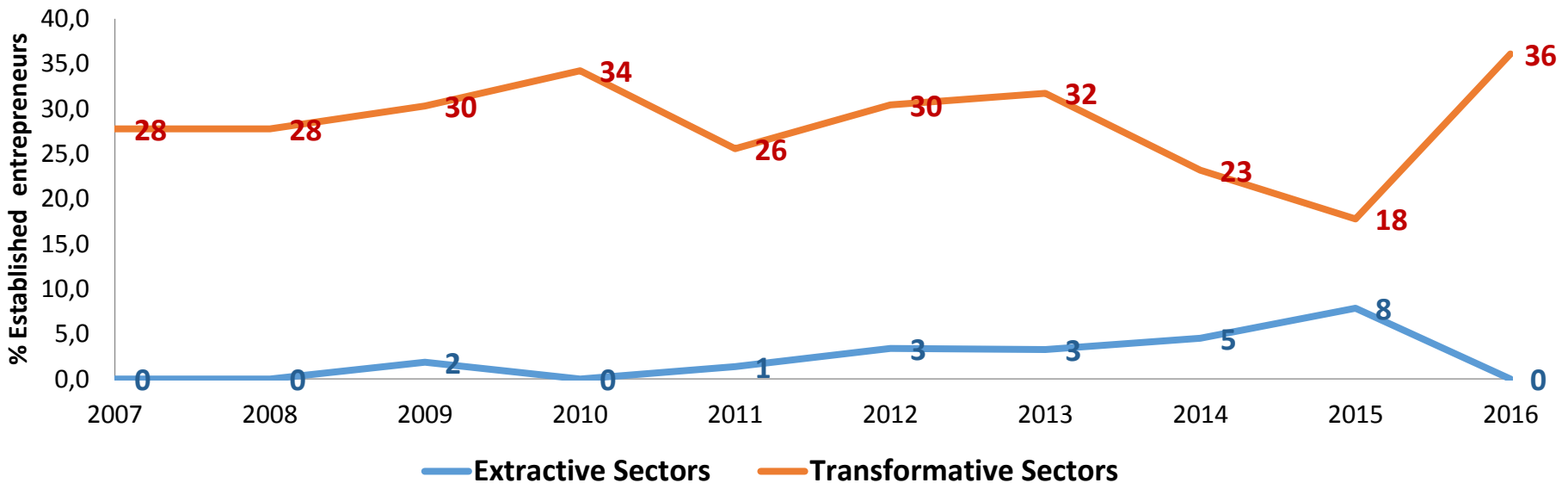
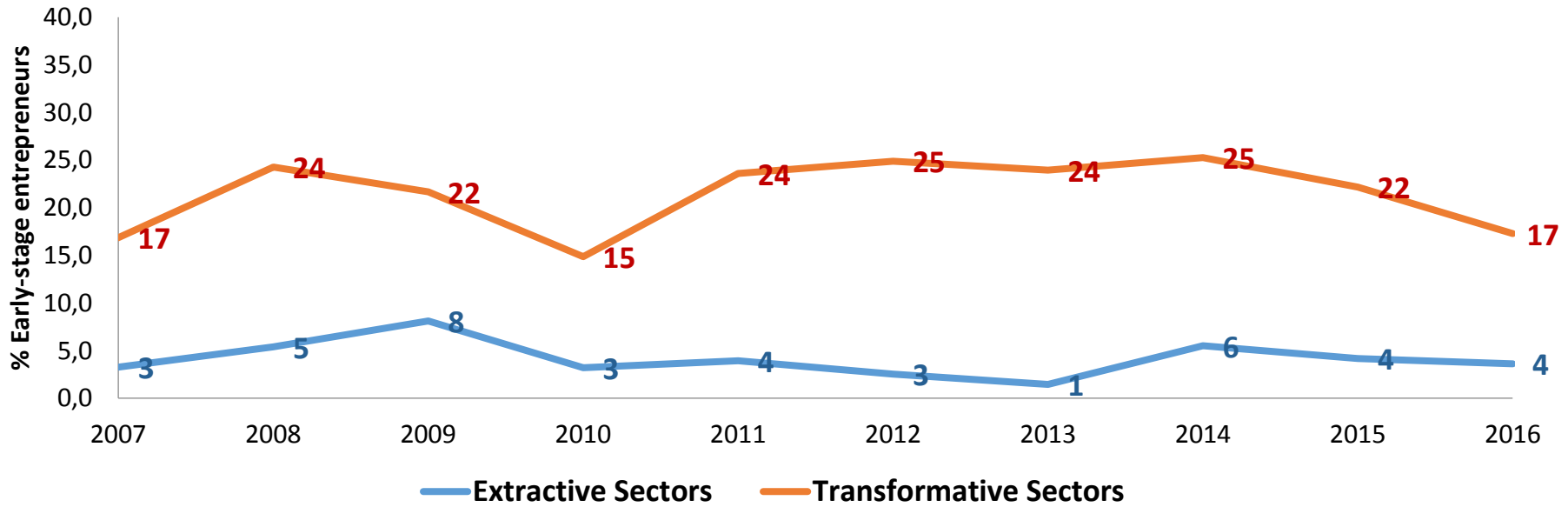
## Early-stage entrepreneurs' educational level



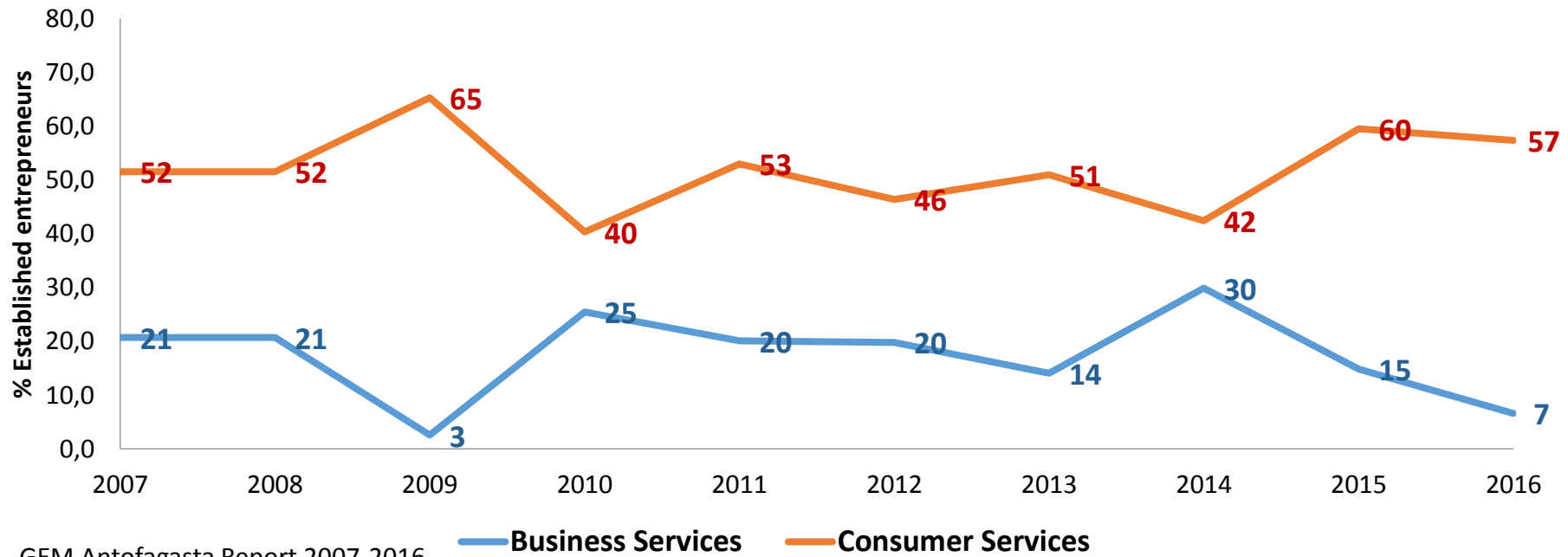
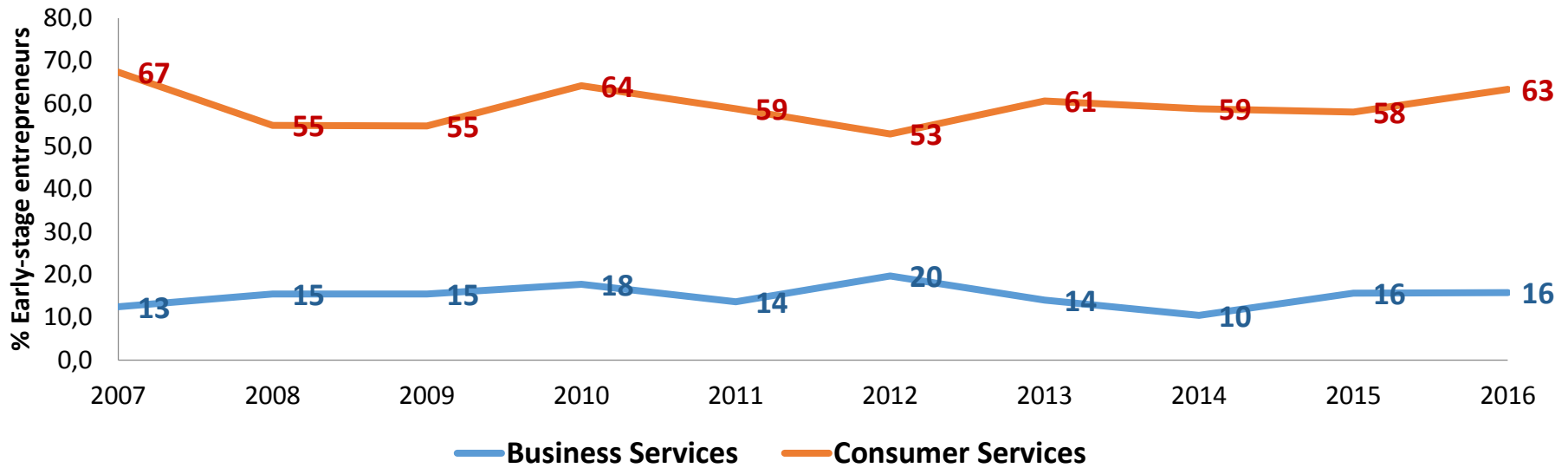
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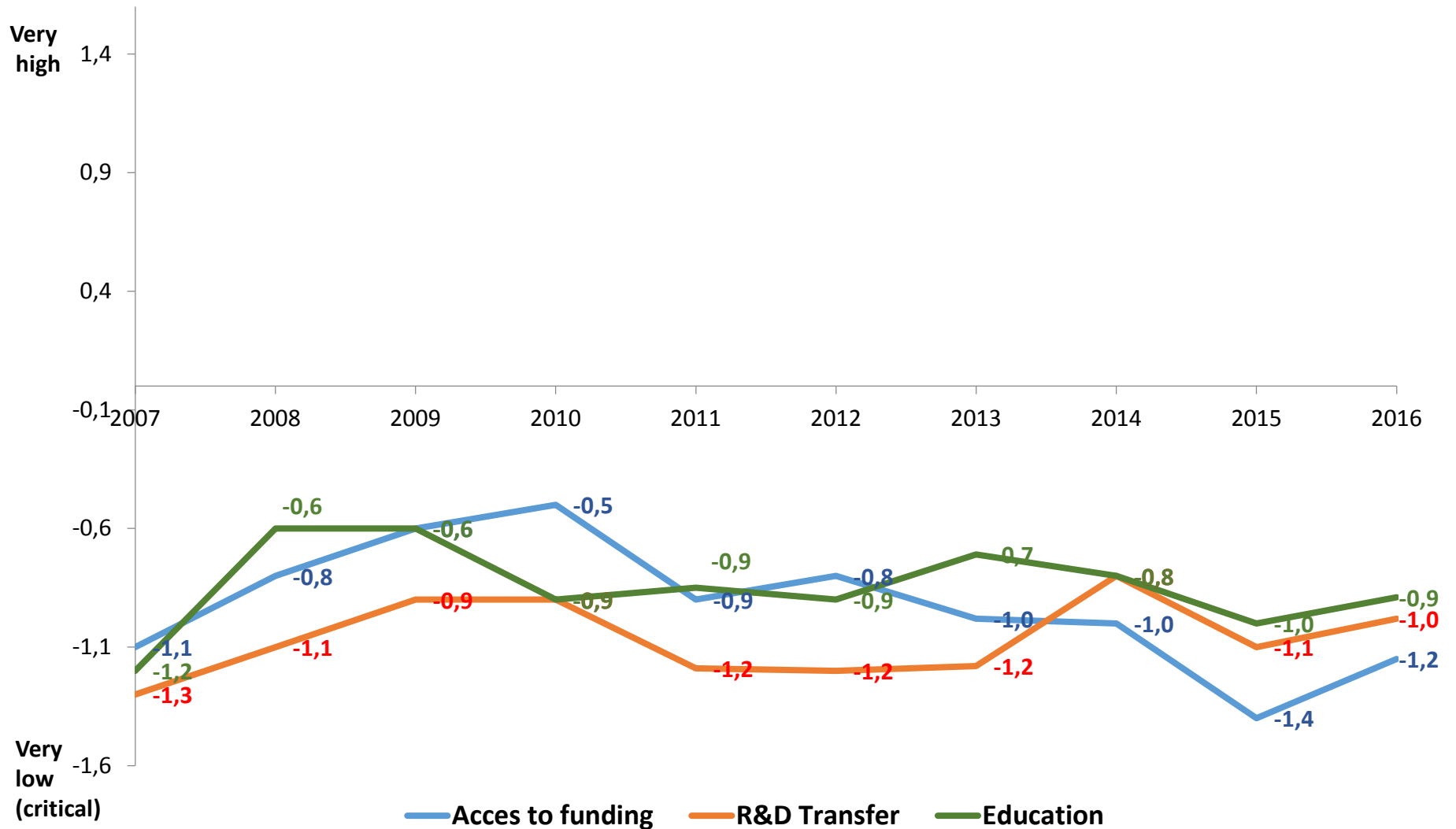
# Entrepreneurs' industrial sector



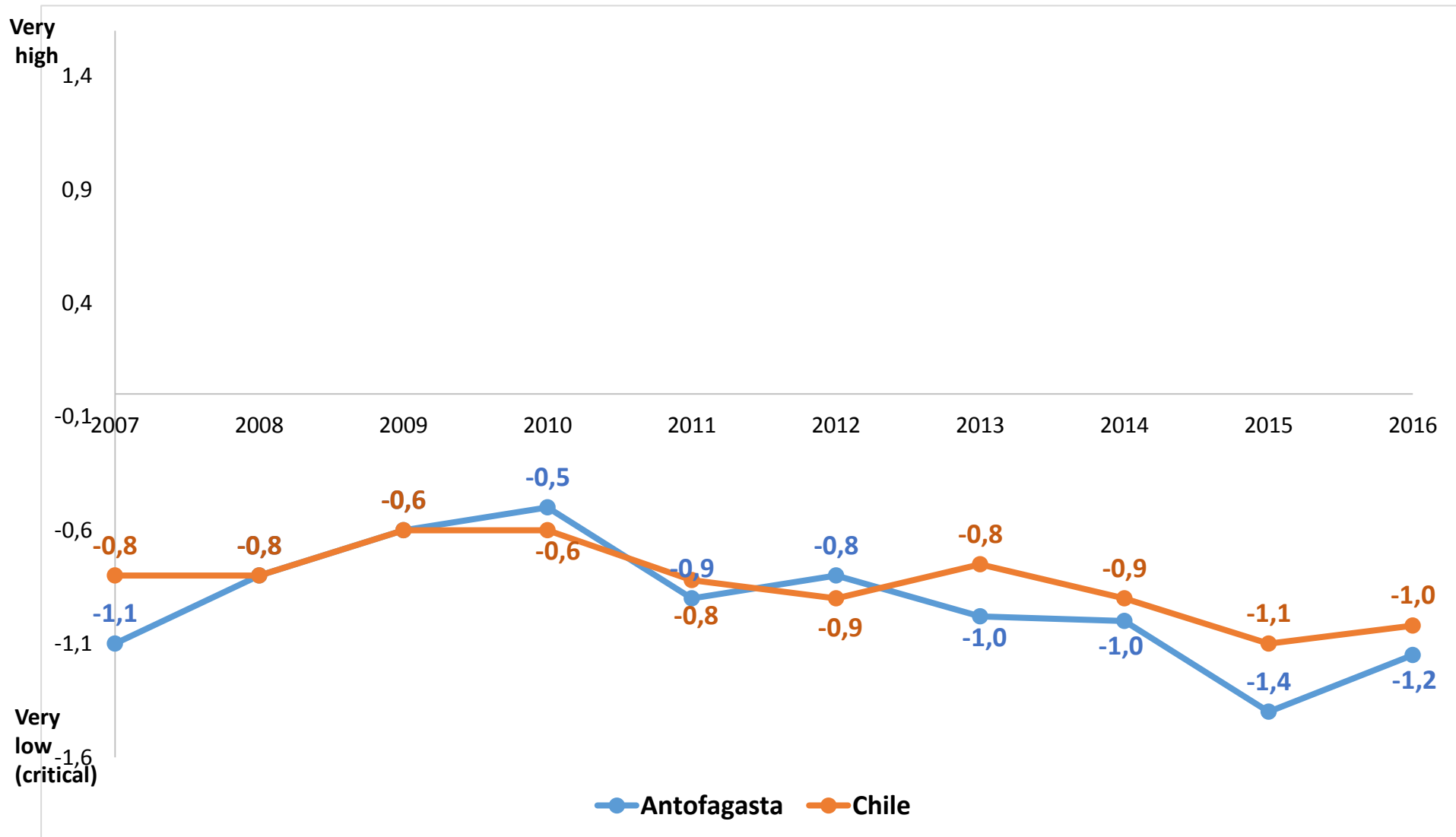
# Entrepreneurs' industrial sector



# Entrepreneurial Ecosystem: Perception of the regional experts

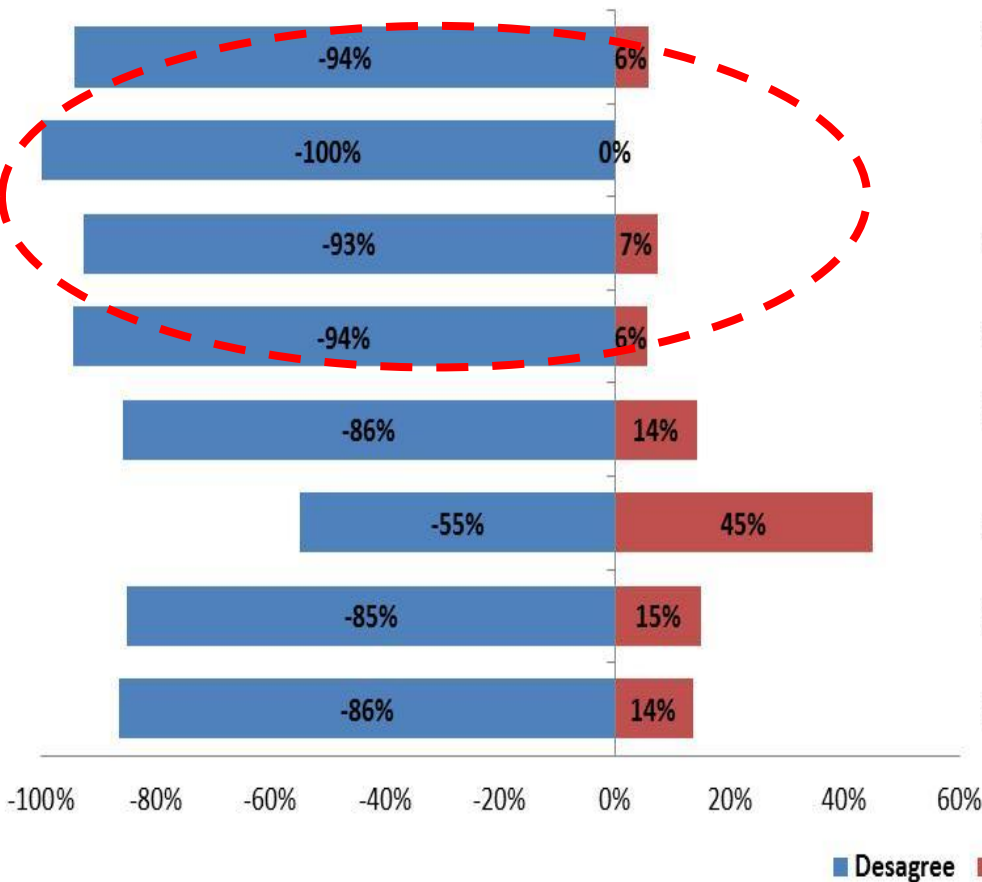


# Evaluation of the access to funding from regional experts



## Categories to access to funding

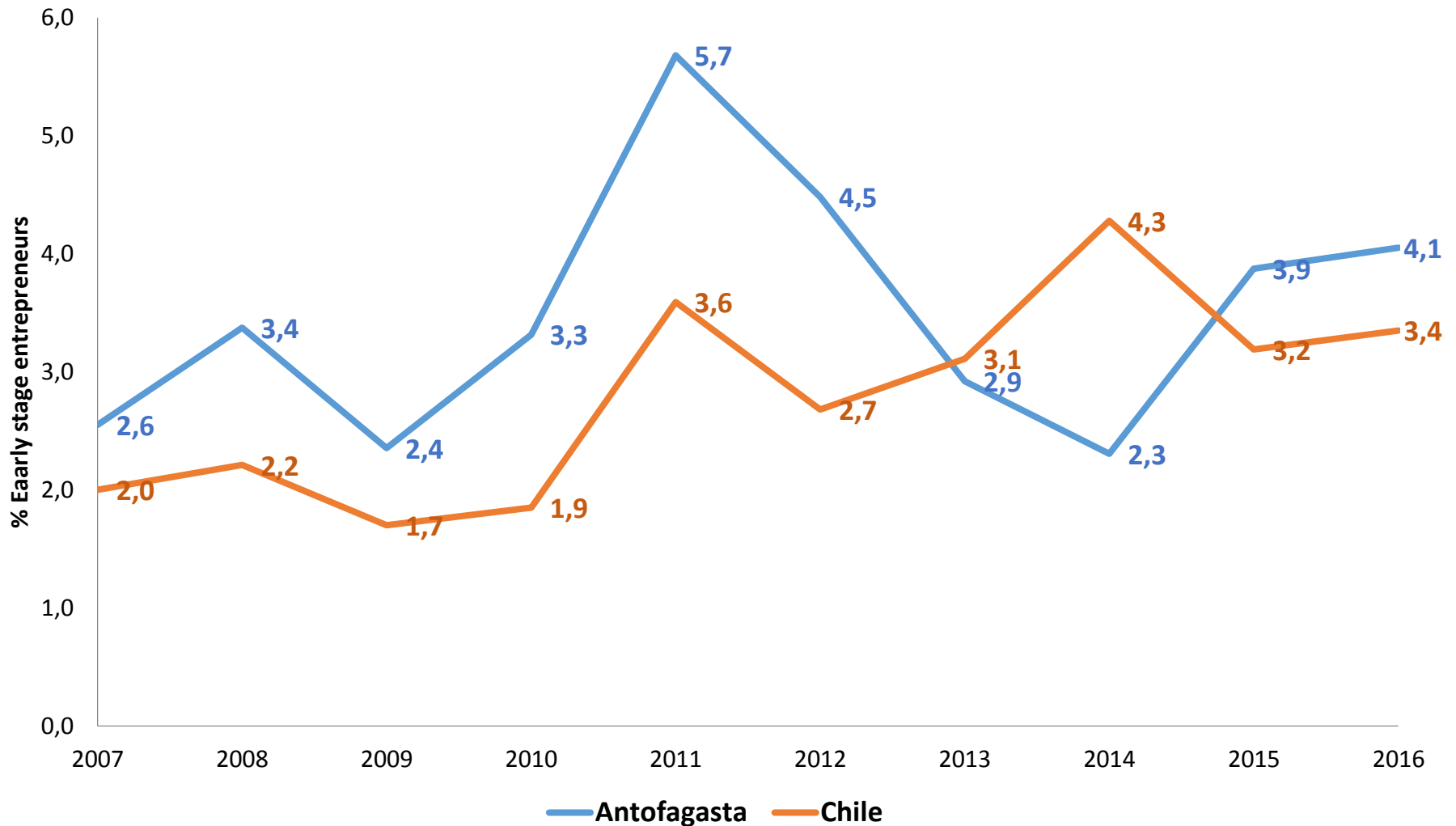
In my region, ...



- there is sufficient funding available through "crowdfunding" platforms for new and growing firms
- there is sufficient funding available through initial public offerings (IPOs) for new and growing firms
- there is sufficient venture capital funding available for new and growing firms
- there is sufficient angel investing funding available for new and growing firms
- there is sufficient funding available from private individuals (other than founders) for new and growing firms
- there are sufficient government subsidies available for new and growing firms
- there is sufficient debt funding available for new and growing firms
- there is sufficient equity funding available for new and growing firms



# Entrepreneurs with high growth potential



In this context, the creation of regional angel networks could be interesting as an endogenous development source in terms of the increase in diversification and innovative capacity, the promotion of entrepreneurship and the enrichment of the regional innovation system.

In this sense it is relevant to know in what extent HNWI in these areas are interested in becoming angel investors.

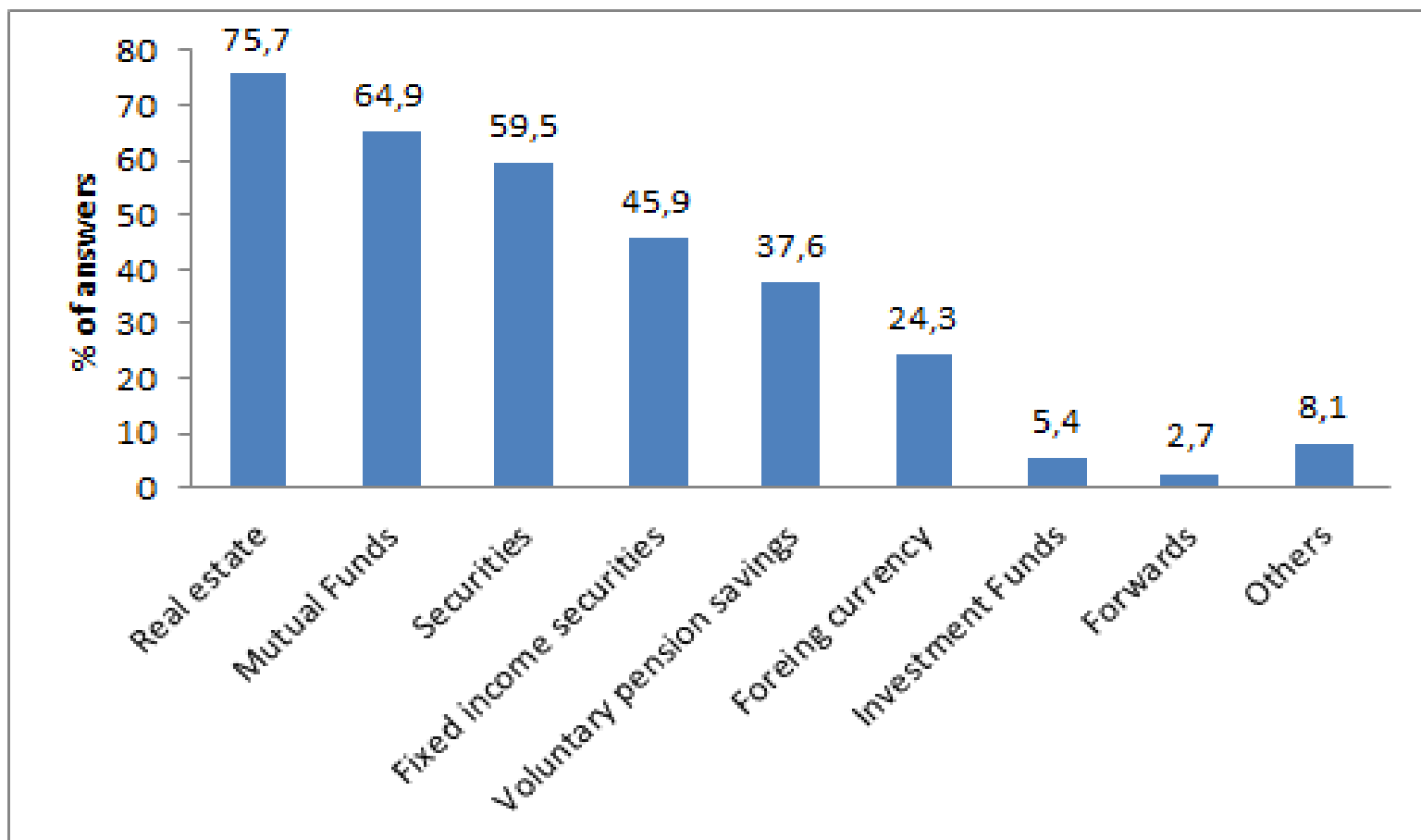
## Some empirical results of HNWI in Antofagasta

### Demographics characteristics of 37 HNWI

Sex	<ul style="list-style-type: none"><li>- Men (81.1%);</li><li>- Women (18.9%).</li></ul>
Civil status	<ul style="list-style-type: none"><li>- Married (83.4%);</li><li>- Widow (10.8%);</li><li>- Other (5.8%).</li></ul>
Age	<ul style="list-style-type: none"><li>- 36-44 years (10.9%);</li><li>- 45-65 years (70.2%);</li><li>- More than 65 years (18.9%).</li></ul>
Education	<ul style="list-style-type: none"><li>- University Post - graduated (51.4%);</li><li>- University Under - graduated (37.8%);</li><li>- Technical education (8.1%);</li><li>- Incomplete technical education (2.7%).</li></ul>
Entrepreneurial experience	<ul style="list-style-type: none"><li>- Full time entrepreneurs (78.4%);</li><li>- Part time entrepreneurs (8.1%);</li><li>- Salaried employees (13.5%)</li></ul>

Source: Romani et al. (2018)

## HNWI 's Portfolio investment



Source: Romaní et al. (2018)

## HNWI's Amount invested

Ranges	N	%
From USD 20,000 to USD 30,000	17	45.9
From USD 30,001 to USD 50,000	6	16.2
From USD 50,001 to USD 100,000	6	16.2
From USD 100,001 to USD 200,000	4	10.8
More than USD 200,000	4	10.8
Total	37	100.0

Source: Romani et al. (2018)

## The Challenge: to create new funding alternatives – Angel Investors?

Do you know the term Angel Investor?	Are you interested in training to be Angel Investor?		Total
	Yes	No	
Yes	3	10	13
No	3	21	24
Total	6	31	37

Source: Romani et al. (2018)

### 16 out of 37 HNWI invested in entrepreneurial projects

Would you like to form the regional BAN?	Do you know the term angel investor?		Total
	Yes	No	
Yes	8	5	13
No	3	0	3
Total	11	5	16

Source: Romani et al. (2018)

# Conclusions

- High rates of entrepreneurial activity.
- Countercyclical performance from 2014.
- Movement towards sectors with less value added.
- Ecosystem with limited access to funding.
- There are high growth potential projects.
- The creation of a critical mass of local angel investors can become a means of recycling the wealth generated during the natural resources booms in order to promote a more diversified and innovative economy.



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