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Forest plantations investments in southwestern Europe: a comparative trend analysis on returns, markets and policies

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Outline

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- 1. Background & context
- 2. Methodological design
- 3. Main results & discussion
- 4. Conclusions









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Literature on investments returns from forest plantations in Southwestern Europe

Country/area	Species	MAI (m ³ /ha/yr)	Rotation (years)	IRR	Reference	
Spain	Hybrid poplar 'Campeador' and 'I-214'	24-40	10-13	11.3%-20.7%	Diaz Balteiro and Romero (1994)	
Ebro valley (Spain)	Hybrid poplar 'I-MC' and 'I-214'	20-30	10-14	4.5%-7.4%	Aunos et al. (2002)	
France	Hybrid poplars	15	17	7.5%	Vidal and Bequey (2008)	
France	Mixed plantation poplar I-214 + walnut	-	?	6.9%-7.6%	Vidal and Bequey (2008)	
Spain and Portugal	Eucalyptus globulus	10-15	10-12	7.0%-8.0%	King (2012)	
Spain	Pinus radiata	14-21	30-38	5.8%-9%	Rodriguez et al. (2002)	
Basque Country (Spain)	Pinus radiata	-	35	<5%	Tolosana Esteban et al. (2013)	
Italy	Hybrid poplar 'I-214'	-	10	2.0%-8.0%	Borrelli and Facciotto (1996)	
Italy	Walnut (<i>Juglans regia</i>)	-	?	9.1%-9.6%	Cianciosi (1996)	

Research Objectives

To provide better information on the **potential timber investment returns** from the main plantation species in **Southwestern Europe** – focusing in particular on Italy, Spain and Portugal – providing means to **compare the current status and profitability trends** of investments in plantations in the region based on an **empirical approach**.

i) to **provide aggregate estimations** of timber investment returns from plantation species with a comparative perspective

ii) to assess the effect of the major policy and market factors influencing investment returns

iii) to **analyse investment returns dynamics**, estimating how they have changed as a result of the evolution of investment costs and timber stumpage prices in recent years.













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Paper in press

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https://www.sciencedirect.com/journal/forest-policy-andeconomics/special-issue/1097NP43Q03



Species Populus x canadensis clone I-214	Region/Area		Investment costs	Main product	MAI (m³ ha⁻¹yr⁻¹)	Harvest age (year)
	Italy	Northern Italy	6 615	Plywood veneer	20	
	l	Normon hary	0,010	r lywood veneer	27	
	Spain	Castile and León (Duero Valley)	4,732		10	17
				Plywood veneer	14	15
				-	20	13
	Spain	Navarre (Ebro Valley)	6,037	Plywood veneer	17	13
					21	12
					25	
Eucalyptus globulus	Portugal	North-coastal	3,890		11, 21, 29	12 / 24
		North-central		Pulpwood	8, 17, 25	12 / 24
		Centre-coastal			7, 16, 28	12 / 24
		Tagus valley			5, 12, 22	12 / 24
Pinus pinaster	Portugal	North-coastal	3,496	Fuel Sawn	7, 11, 15	(15) / (25) / 35
		North-central			4, 9, 14	(15) / (25) / 35
		Centre-coastal			2, 6, 11	(15) / (25) / 35
		Tagus valley			4, 8, 11	(15) / (25) / 35
		Northern interior			3, 6, 10	(15) / (25) / 35
Pinus radiata	Spain	Basque Country	5,765	Fuel	14	(8) / (18) / (23) / 35
					18	
				Sawn	22	

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Conclusions

- Assumptions to be taken in mind
- In the SW European context → there are opportunities for interesting returns from forest plantations investments mainly for sectorial investors (i.e. current landowners and forest products industry), and only in some cases potentially reasonably interesting opportunities also for financial investors
- Comparable to average returns in northern hemisphere → but considerable differences among species and regions
- Structural limitations in the region that need to be considered:
 - timber market
 - land ownership structure
 - exposure to biotic and abiotic risks
- Basis for designing an **information system/observatory** on forest investments and markets in the EU → E.g. **Farm Accountancy Data Network** for agriculture

