

 Content archived on 2024-06-18



# Identifying the sign and strength of complements in production

## Fact Sheet

### Project Information

#### COMPLEMENTS

Grant agreement ID: 247448

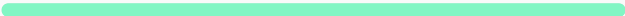
Project closed

#### Start date

1 October 2009

#### End date

30 September 2013



#### Funded under

Specific programme "People" implementing the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007 to 2013)


#### Total cost

€ 100 000,00

#### EU contribution

€ 100 000,00

#### Coordinated by

UNIVERSIDAD POMPEU FABRA  
 Spain

This project is featured in...



## Objective

Are better workers employed in more productive jobs? Understanding Assortative Matching is key for evaluating efficient allocation of workers to firms. We argue that using wage data alone, it is virtually impossible to identify whether Assortative Matching between worker and firm types is Positive or Negative, i.e. whether there are complements or substitutes in technology. In standard competitive matching models the wages are determined by the marginal contribution of a worker, and the marginal contribution might be higher or lower for low productivity firms depending on the production function. For every production function that induces positive assortative matching we can find a production function that induces negative sorting but generates identical wages. This arises even when we allow for non-competitive mismatch, for example due to search frictions. Even though we cannot identify the sign of the sorting, we can identify the strength, i.e. the magnitude of the cross-partial, and the associated loss in output. While we show analytically that standard fixed effects regressions are not suitable to recover the strength of sorting, we propose an alternative procedure that measures the strength of sorting in the presence of search frictions independent of the sign of the sorting. Finally, this problem is challenging because the identification is based on wage data alone. We therefore also propose a flexible production function that derives the productivity of individual jobs from the firm's aggregate profits.

## Fields of science (EuroSciVoc)

[social sciences](#) > [economics and business](#) > [economics](#) > [production economics](#) > [productivity](#)



## Programme(s)

[FP7-PEOPLE - Specific programme "People" implementing the Seventh Framework Programme of the European Community for research, technological development and demonstration activities \(2007 to 2013\).](#)

## Topic(s)

[FP7-PEOPLE-2009-RG - Marie Curie Action: "Reintegration Grants"](#)

## Call for proposal

FP7-PEOPLE-2009-RG  
[See other projects for this call](#)

## Funding Scheme

[MC-IRG - International Re-integration Grants \(IRG\)](#)

## Coordinator



**UNIVERSIDAD POMPEU FABRA**

EU contribution

**€ 100 000,00**

Total cost

**No data**

Address

**PLACA DE LA MERCE, 10-12**

**08002 Barcelona**

 **Spain** 

Region

**Este > Cataluña > Barcelona**

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

**Last update:** 16 July 2019

**Permalink:** <https://cordis.europa.eu/project/id/247448>

European Union, 2025

