

Masters Thesis In Wind Power Project Management

Making the Most of Wind: A Business Perspective on the Subsidy Systems in France, Germany, Spain and Sweden.

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Background There are significant differences in the European subsidy systems for wind power. Four countries systems are evaluated based on varying levels of production and two different time periods to determine which system provides the most attractive location for businesses to develop their wind power projects.

Aim This Masters thesis aims to create a better understanding of which subsidy systems are most attractive to businesses looking to build new wind power projects.

Method The thesis uses four criteria to determine which system is the most attractive to businesses. The first criteria is a comparison of total income, the second for is the variability of payments, the third is the timing of payments and the final criteria is the stability of the system itself. Data for this thesis was provided by Siral AB and additional data was obtained from Nord Pool, CESAR Elcertifikat, and a number of other sources. Three different levels of production were used that equate to high, moderate and low wind areas to determine if a business's preference for a subsidy system may depend on their project's production.

Determination of Highest Total Income

The highest income levels at three production levels were found for each country and then compared:

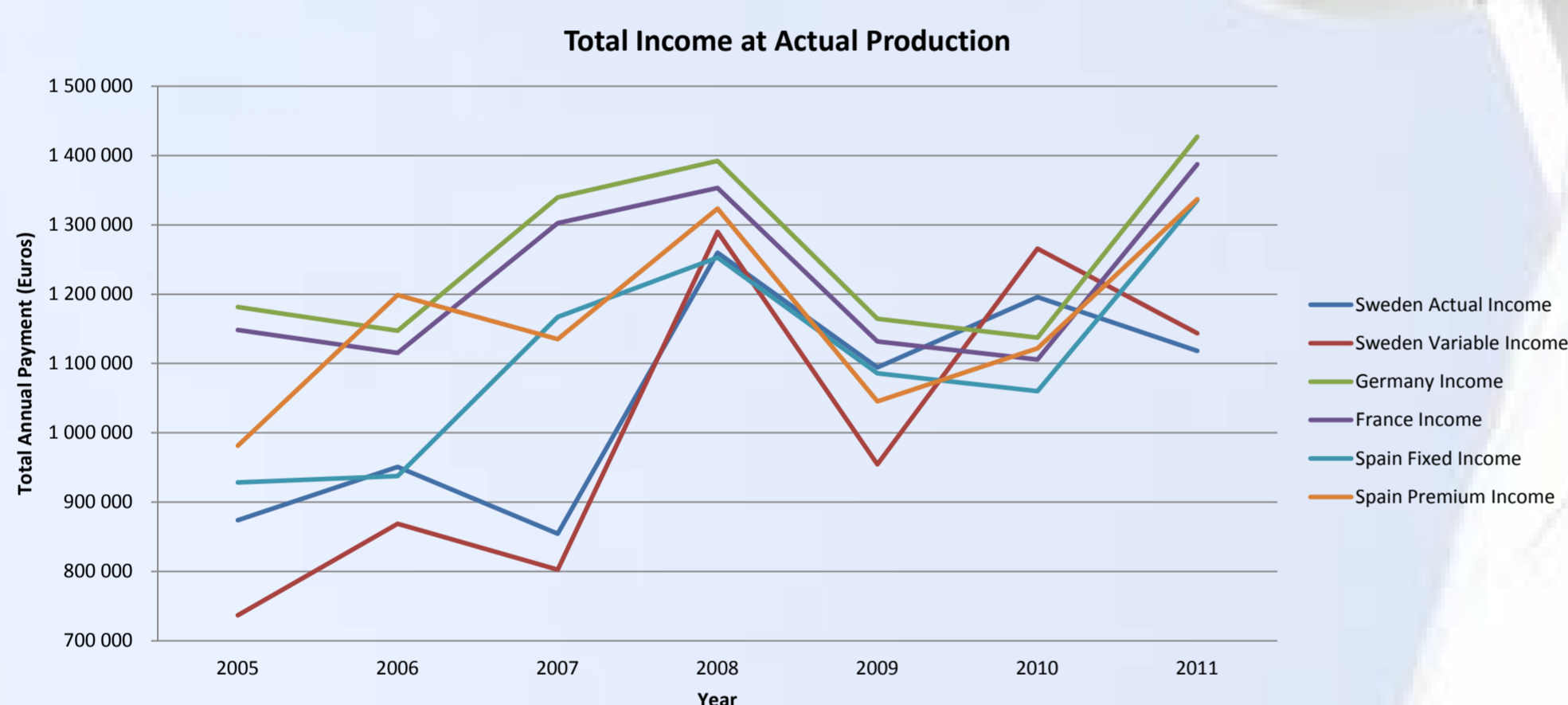


Figure 1: Income Variability at Actual Production for First 7 Years

Determination of Price Variability

The highest income levels at three production levels were found for each country and then compared:

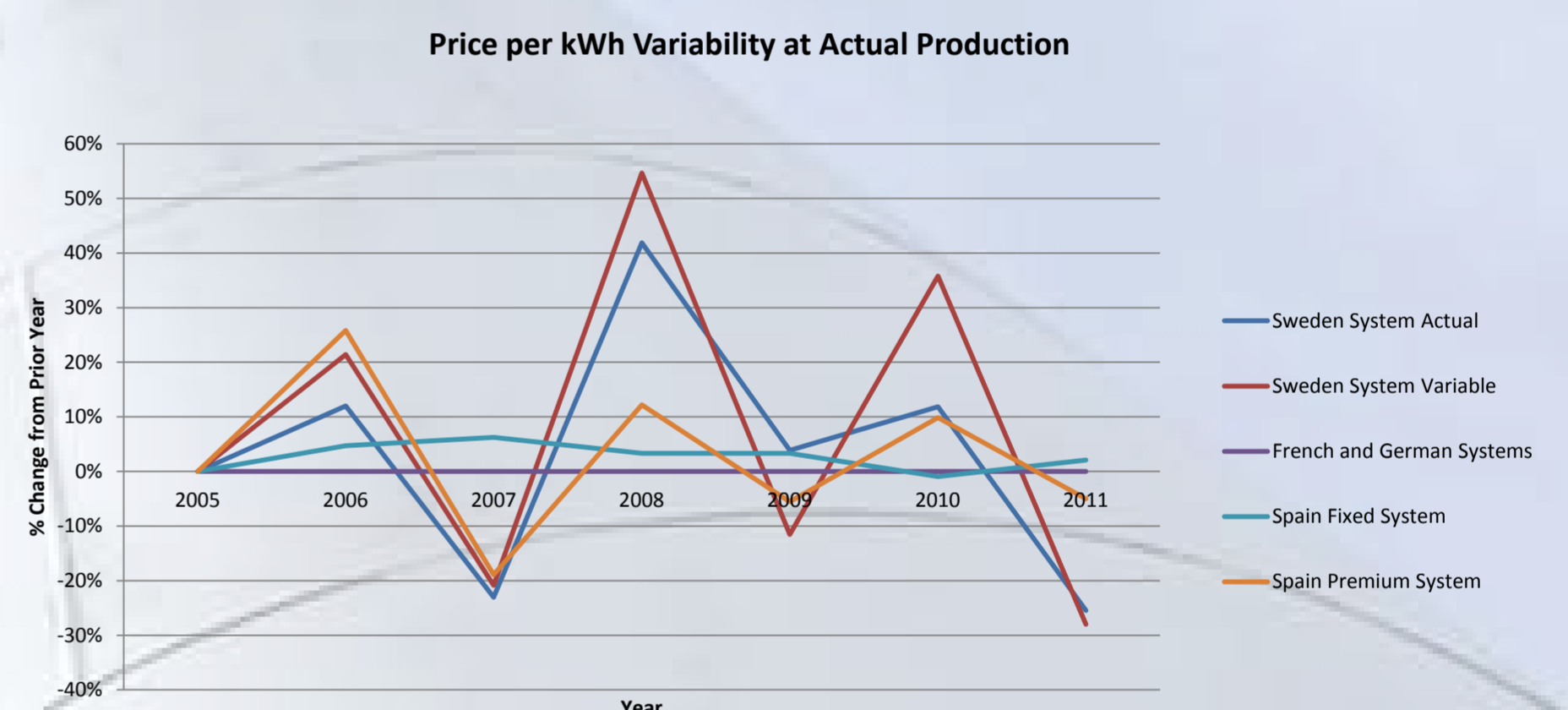


Figure 3: Lowest Payment Price Variability at Actual Production for First 7 Years

Determination of Lowest Payment Variability

The highest income levels at three production levels were found for each country and then compared:

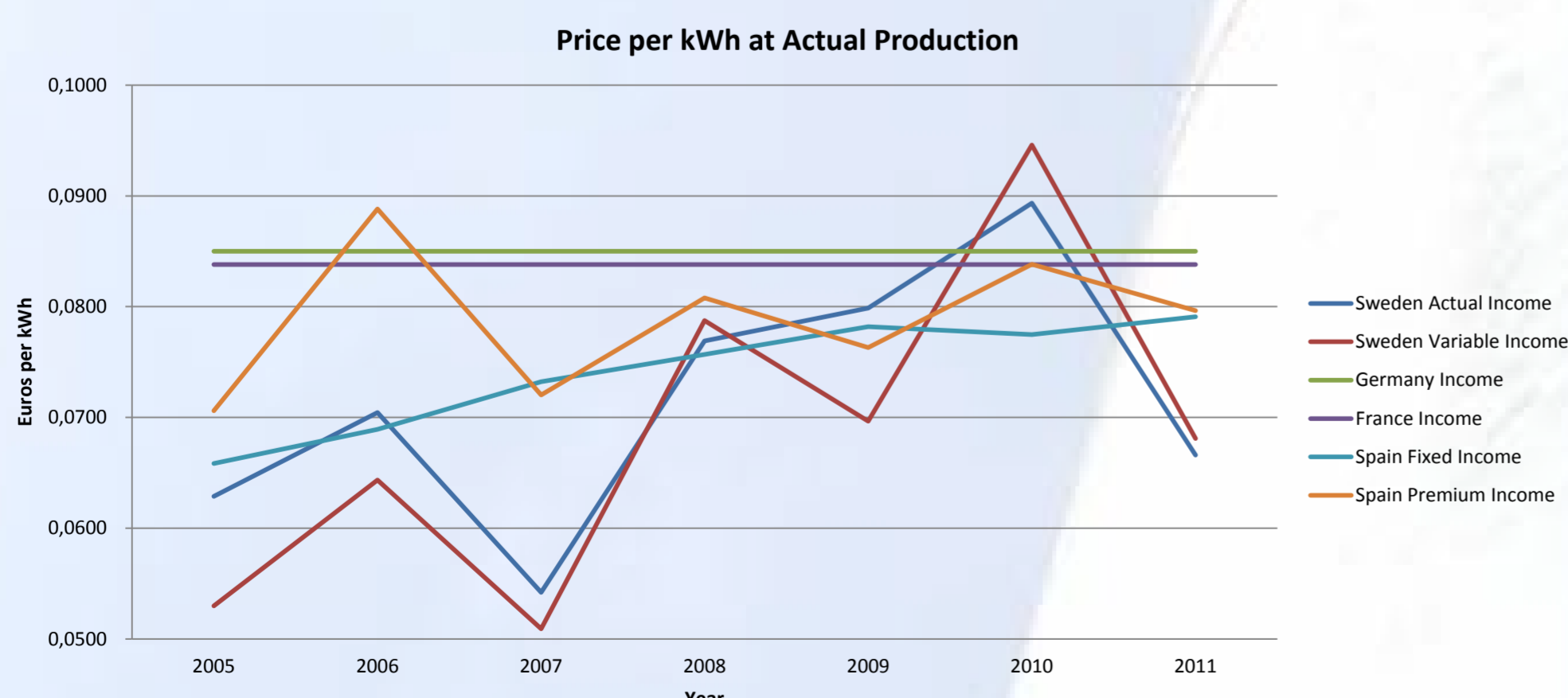


Figure 2: Lowest Payment Variability at Actual Production for First 7 Years

Results

The paper showed that the level of production at a site directly effected which subsidy system was most attractive to a business seeking to develop wind power. It also showed that of the countries reviewed Sweden was the least attractive on nearly every production level and time period. The German system was generally superior on all of the criteria reviewed, with a few exceptions.