IMPLICATIONS OF NEUTRALITY RULE:

AN APPLICATION TO OTHER SECTORS

Healthcare Insurance Industry

September, 2015

CONTENT

1. NEUTRALITY RULE IN HEALTHCARE INSURANCE INDUSTRY

Health insurance companies provide healthcare services to policyholders. Healthcare services mainly include services such as primary healthcare, hospitalization, emergency ambulance transportation and special medical treatments. These companies either use their own health staff and facilities or stablish agreements with other private healthcare partners.

The goal of health insurance companies' business model is to optimize fixed and maintenance costs in the network, guaranteeing a high quality and variety of healthcare services, and to reduce actuarial risks[1]. To this aim, they need to reach a critical number of policyholders. Health insurance premium price should guarantee business profitability and simultaneously cover actuarial risks**.**

The private insurance industry cannot survive without managing risks, as this is the main driver to guarantee the industry's profitability.

The larger and the more diversified the customers' base[2], the bigger the possibility to establish agreements with other partners and more competitive health insurance premium pricing. An extensive and diversified policyholders' portfolio allows companies to reduce actuarial risks. This would eventually be translated into a competitive advantage that would increase companies' returns and reduce policyholders' prices.

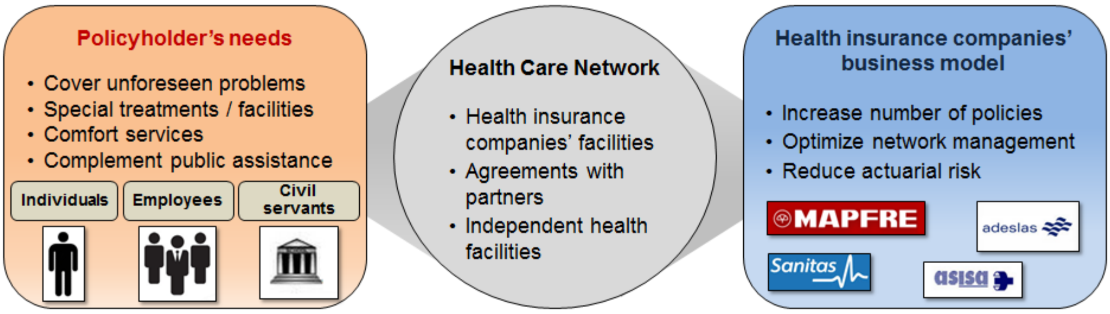
In general, depending on the premium type, customers can be divided into three groups:

- Private individual insurance: The health insurance premium is hired individually.
- Private collective insurance: Companies hire health insurance premiums for their employees.
- Public collective insurance: Public sector offers private Healthcare treatment for civil servants provided by mutual societies and health insurance companies.

This division is important as health insurance companies apply different strategies to each group of customers.

[1] Actuarial risk refers to the risk that very negative scenarios could harm insurance companies' solvency. That is, insurance companies need to compensate high risks with low risks, having a reasonable customers' portfolio to guarantee enough resources to financially cover an eventual very negative scenario.
[2] Balance among net contributors (those whose payment flows exceed the value of services perceived) and receivers (those whose payment flows are inferior of the value of services perceived).

Graph 1: The Healthcare insurance business model diagram



Healthcare insurance companies' commercial strategies for customers

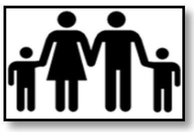
Insurance companies use different strategies to efficiently manage risks, increase the number of healthcare premiums and increase their market share to succeed in their business model.

i. **Offers according to policyholder's profile:** Insurance companies charge different health insurance premiums according to individual's characteristics such as age, sex or profession. These features determine the customers' risk profile. The higher the risk, the higher the health insurance premium.

ii. **Health insurance premiums depending on policyholders' location:** Medical treatment services have higher difficulties to be established in some regions as they respond to different profiles and characteristics, such as the islands or low population density areas.

iii. **Commercial offers according to the degree of coverage: There are different forms;**
   - Free or partially covered general healthcare attention,
   - Free healthcare attention in their medical network plus partially covered health attention in other medical centers,
   - Free healthcare attention in their medical network but no hospitalization treatment included.

iv. **Discounts according to the number of policyholders:** For example discounts or promotions on family health insurance premiums. This is a loyalty strategy to increase market share.



v. **Discounts for in-advance premium payments:** Companies offer discounts if payments are made in advance, for instance discounts on annual payments made in advance. This is a commercial strategy to increase financial benefits and revenue certainty.

vi. **Discounts for companies[3]:** All employees within a company have equal prices

[3] In this sense, we may consider "companies" in a broad dimension, including collectives and professional associations.

and discounts compared to health insurance premiums hired individually. The larger the number policyholders within a company the higher the discount. This strategy allows healthcare companies to increase their customers' base and reduce their actuarial risk.

i. **Collective agreements for civil servants:** Mutual companies[4] have very convenient conditions as they have guaranteed a big number of policyholders. This is one of the main strategies to reduce actuarial risks and, specially, to increase the number of premiums.

Neutrality rule on health insurance companies' strategies

The imposition of "neutrality rule" would significantly affect strategies applied by health insurance companies on healthcare policyholders, as "When neutrality occurs, all market participants should be treated equally in terms of prices, preferences, quality, quantity or priority". A strict "neutrality rule" interpretation would imply that health insurance companies are not allowed to distinguish their policyholders depending on their risk profiles and the policyholder's location, as in the Spanish National Health System[5]. They should charge the same premium price regardless the actuarial risk's coverage.

Hence, price uniformity would clearly reduce health insurance companies' tools to manage their actuarial risks and their health assistance network.

Low-risk and healthier policyholders would have to deal with a significant increase in their health insurance premiums' prices due to the imposition of a unique premium price. Some of them would, thus, leave the market, leading to an increase in the number of high-risk policyholders over the total.

As a result, actuarial risks would increase and companies would be forced to raise premium prices. This model would expel some companies from the market and reduce access to private health. In particular:

- In the case of individual premiums, low-risk customers would be less encouraged to hire premiums for their low-risk relatives.
- In the case of collective premiums, companies would be less encouraged to hire healthcare premiums for their employees.
- In the case of public collective insurances, the private insurance companies would be more reluctant to establish agreements with mutual societies, as they would be mainly composed of individuals with a high-risk profile[6].

[4] Mutual healthcare companies are intermediary organizations that provide common health services to all of their members. They are financed from their members' contributions and normally use the private healthcare system to supply health assistance. In the Span, for instance, the most well-known mutuality is MUFACE.

[5]http://www.msssi.gob.es/organizacion/sns/docs/sns2012/SNS012__Ingles.pdf provides a universal coverage for all beneficiaries.

[6] High-risk profiles are individuals prone to suffer higher than average diseases as a consequence of certain individual behaviors, familial and individual histories and physiologic changes.

Supply of private health assistance schemes would, then, be severely reduced. Low-risk policyholders would leave private service and only rely on their national healthcare systems, as premiums would no longer be competitive.

Customers' welfare would be worse off in terms of health assistance.

a) **Impacts of neutrality rule on health insurance companies**:
   - Less volume of policyholders
   - No tools to manage actuarial risks
   - No segmentation strategies to attract customers
   - Loss of business profitability
   - Less incentives to invest and deploy large health assistance networks

b) **Impacts of neutrality rule on customers:**
   - High-risk' policyholders would expel low-risk' policyholders (adverse selection)
   - Higher premium prices
   - Less private health supply
   - Less variety of services

Specific effects on each commercial strategy on customers are shown in table 1.

Table 1: Summary of retail commercial practices that would be forbidden in a "net neutrality rule" scenario and impact on consumers of healthcare private insurance

<table>
<tr><th>Commercial Strategy</th><th>Neutrality Rule restrictions</th><th>Impact on customers</th></tr>
<tr><td>Strategies addressed to reduce actuarial risk:
Health insurance premium based on individual features</td><td>All policyholders should be treated equally
No discriminatory practices depending on the individual or collective features can be applied</td><td>· Low risk's policyholders would be forced to subsidize high risk policyholders premiums
· Eventually low risk policyholders would be expelled from private insurance market
· Premiums would rise
· Less private health services supply</td></tr>
<tr><td>Discounts for in advance premium payments:
Discounts on annual payment</td><td>Enforces uniform prices for different forms of payment
No discriminatory practices on payments made in advance</td><td>· No incentives for paying in advance
· Less financial revenues would lead to higher premiums</td></tr>
<tr><td>Discounts according to the number of policyholders:
Discounts for families or big groups</td><td rowspan="3">All market participants should be treated equally
No discriminatory practices depending on the number of policyholders or collectives</td><td rowspan="3">· No discount opportunities
· Less incentives to hire health insurance premiums for civil servants
· Revision of the health insurance system for civil servants
· Fewer incentives for companies to insure their employees
· Higher premiums
· Less private health services supply</td></tr>
<tr><td>Discounts in private collective insurance:
Discounts for big groups of business' employees</td></tr>
<tr><td>Collective agreements for civil servants:
Very convenient conditions for mutual companies</td></tr>
</table>

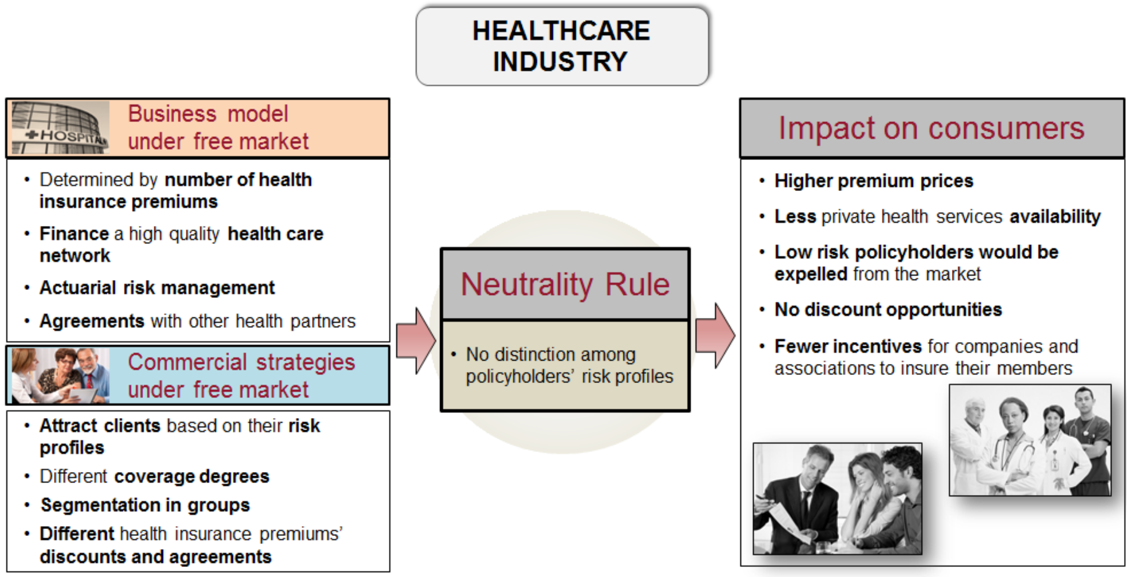
Main findings and conclusions

If a “neutrality rule” was imposed in the healthcare industry, health insurance companies would not be allowed to distinguish among policyholders’ risk profiles. This could clearly increase their actuarial risk, yielding to more difficulties to optimize the network management.

A potential “neutrality rule” in the healthcare industry would thus lead to:

- Higher health insurance premium prices.
- A reduction in the private health services supply.
- A potential expelling from the market of certain types of policyholders, especially those with lower risks.
- Fewer incentives for companies and families to hire insurance services.

Graph 2: Summary of “neutrality rule” application on healthcare industry



2. ANNEX I: DESCRIPTION OF THE HEALTH INSURANCE INDUSTRY BUSINESS MODEL

The importance of healthcare insurance services in Spain has been increasing in the last years. In 2012, there were about 10.37 million of health insurance premiums. In Spain, policy holders commonly use the private healthcare system in addition to the public health system. The average length of current health insurance premiums is 6.1 years.

Health insurance companies' business model is addressed to increase the number of health insurance premiums as a strategy to reduce their actuarial risk[7] and improve the quality and variety of services of their health networks. Insurance companies also use financial strategies to invest revenues from health insurance premiums, although they have to guarantee enough liquidity to face uncertainty of expenses.

i) Business model description, drawing out the relevant market, customers and suppliers profiles

Health insurance companies provide healthcare services to cover uncertain future events –such as the risk of treating potential future diseases– in exchange of a health policy. Healthcare services mainly include hospitalization, primary healthcare, ambulances, and medical special treatments.

The most important health insurance companies in Spain are Adeslas, Sanitas, DKV, AXA, ASISA and Mapfre. There are other several small companies, highly regionally ingrained that only provide their services in specific regional markets.

According to Spanish Antitrust authorities, the health insurance market has a regional dimension, since customers need to minimize travel time costs and want to be close from health services.

Health insurance companies either use their own health facilities or stablish agreements with other private healthcare centers. The person insured by reimbursement' health insurance premiums can use independent centers. Ultimately, insured freely choose their provider of healthcare services, and companies reimburse, totally or partially, the costs of the health services provision. Health insurance companies commonly use customers' base to offer additional insurances that are usually charged separately from the health policy.

Insurance companies provide a healthcare network of doctors, equipment, hospitals and similar facilities to provide medical assistance. Customers can be divided into three groups:

[7] Risk that a calculated model of a health insurance premium may be inaccurate or subject to unforeseen events. This model includes frequency, severity and correlation of losses.

- Private individual insurance: the health policy is taken individually or by the family unit
- Private collective insurance: enterprises take one health policy that covers their employees.
- Public collective insurance: civil servants have a special healthcare treatment. These employees can choose among a public or a private healthcare system. Private healthcare companies can provide health coverage through agreements with public mutual societies.

This division is important as health insurance companies apply different strategies and health insurance premiums' account to each group of customers.

The business model of this industry is based on the provision of a wide network of health infrastructure and doctors that covers the largest possible variety of medical needs and a wide geographical range. Health insurance companies need to attract a large number of customers to finance the health services network and diversify the portfolio risk and reduce uncertainty costs.

As they gain more customers, insurance companies increase bargaining power when establishing agreements with health centers. At the same time, the larger and the more diversified is the customers' base[8], the more competitive are health insurance premiums.

Therefore, health insurance companies need to develop strategies to increase their network. To attract and gain more clients and take more advantages of economies of scope, it is common that they extend their product portfolio to other areas such as life insurance, house insurance and car insurance.

ii) Revenue and cost function and profit maximization description

The main source of revenue of the healthcare insurance is the health insurance premiums paid by the insured. Companies also obtain financial revenues by investing the funds obtained from the health insurance premiums in other assets.

The main premium costs are related to the compensations and the reimbursements paid to policy holders and the health network functioning.

The uncertainty of costs is one of the main particularities of the insurance industry. While companies have certainty in revenues, costs are unpredictable, as payments to policy holders are exactly to cover eventual health events.

For this reason, health insurance companies need to pay special attention to their financial assets, liabilities and risks. They must keep control for cash management in order to guarantee enough reserves in the face of cost uncertainty.

[8] Balanced among net contributors and receivers.

iii) Description of discrimination mechanisms and effects on quantity, quality, efficiency, equity and incentives of the industry

Insurance companies use different strategies to manage risks, appeal customers, increase their market share and increase their bargaining power over health services providers.

- Offers according to policyholder's profile
- Health insurance premiums depending on policyholders' location
- Commercial offers according to the degree of coverage
- Discounts for in-advance premium payments
- Discounts according to the number of policyholders
- Discounts for companies
- Collective agreements for civil servants.

3. ANNEX II BIBLIOGRAPHY

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