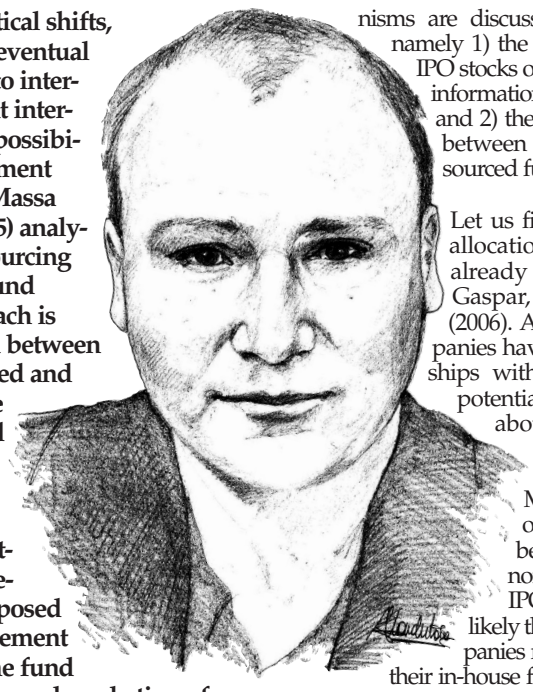
Research in Finance

On the impact of outsourcing in the international Fund Industry



Major geopolitical shifts, notably the eventual Brexit, lead to interesting questions about international outsourcing possibilities of fund management services. Chuprinin, Massa and Schumacher (2015) analyze the impact of outsourcing in the international Fund Industry. Their approach is based on a distinction between Funds that are managed and marketed by the same financial group, called "in-house", and Funds managed on behalf of other financial groups called "outsourced". The management company is supposed to perform the management of the portfolio and the fund family, the distribution and marketing of the fund. For in-house managed funds, the management company and the fund family belong to the same entity.

In order to detect outsourced funds, the difference in reporting between two datasets is checked. One dataset, namely FactSheet/LionShare report the management company and the financial group that manages the fund, whereas the other dataset, Morningstar Direct, report the fund families of each respective fund. If the fund family in the second dataset differs from the financial group disclosed in the first dataset, the fund is "diagnosed" as outsourced. Other sources are then checked to verify that the supposedly outsourced fund is not managed by a subordinated structure.

Broadly speaking a quarter of funds is outsourced and different sources such as Chen *et al.* (2013) and Del Guercio and Reuter (2014) seem to broadly agree with that number. Chuprinin *et al.* (2015) analyse differences in performance as a function of whether the fund is outsourced or not. Estimates indicate that outsourced funds underperform in-house funds by approximately 7 bps per month if we compare performance with the Carhart 4-factor model. On an annual basis this makes up approximately 84 bps and corresponds to approximately 57% of fund's annual expenses. Investment companies thus seem to treat their in-house funds more favourably than the outsourced funds they manage, a phenomenon called "preferential treatment". Two implementation mechanisms are discussed in the literature, namely 1) the strategic allocation of IPO stocks or the privileged use of information for in-house funds and 2) the cross-trading activity between in-house and outsourced funds.

Let us first focus on the IPO allocation, a mechanism already documented in Gaspar, Massa and Matos (2006). As management companies have long-term relationships with underwriters, they potentially have information about interesting IPO stocks.

Moreover, IPO stocks often outperform at the beginning, a phenomenon known as the IPO Puzzle. It is highly likely that management companies might allocate IPOs to their in-house funds rather than their co-managed outsourced funds. In order to evaluate the impact of IPO allocations, the authors measure the weight of IPOs in the respective in-house and outsourced funds. The differences between those weights indicates that outsourced funds are allocated approximately 44% fewer IPO stocks than in-house funds. The preferential treatment due to IPO allocations seems to explain around a third of the return gap between funds of different status.

Concerning privileged use of information, suppose that a management company has some information about future potential stock movements. The question is whether it is exploiting these opportunities systematically for in-house funds. This is checked by estimating the correlation between buy and sell positions at time *t* and future stock returns between *t* and *t+1*. For quarterly data, the correlation between buy trades and future stock returns is around 35% larger for in-house funds, confirming the assumption that the best investment opportunities are mostly allocated to in-house funds.

Finally, let's consider cross-trading between affiliated funds. Gaspar *et al.* (2006) discuss how cross-trading can affect performance either through favourite prices between affiliated funds (instead of through exchanges) or liquidity provision in case of distress. According to Chuprini *et al.* (2015) the cross trading between affiliated funds is twice higher than the unconditional cross trading (between unrelated funds). Moreover, the cross trading is especially higher during times when funds are distressed.

Holmstrom and Milgrom's (1987) Principal-Agent model can now be applied to analyse the theoretical mechanisms. The fund family can be viewed as the Principal and the Management Company as the Agent. The question is whether outsourced funds just get treated less favourably than in-house funds or whether preferential treatment can be seen as incentive provision by the Principal. The first assumption is called the "inferior product hypothesis", the second the "incentive hypothesis". Moral Hazard plays a key role and the eventual degree of Moral Hazard is directly related to the monitoring ability of the Principal and the bargaining power of the Agent.

The mechanisms are the following: If the Principal cannot adequately monitor, the Agent is shirking and the former has to provide a preferential treatment to the Agent. Second, the more market power the Agent has, the more bargaining power he has to get a preferential treatment. The authors measure monitoring ability through the use of a common language by the Principal and the Agent. Note that the country location of the Principal and the Agent matter in this case, an interesting point in relation to the eventual impact of the Brexit. Bargaining power of the Agent is measured through the market share of the subcontractor firm in the outsourcing market.

Chuprinin *et al.* (2015) develop the following empirical approach to discriminate between both hypotheses. First, they note that the tasks of managing in-house and outsourced funds are complementary. Indeed, the agent acting as a subadvisor can use his skills and investment research to manage other in-house funds. This is the spill-over effect which increases with the number of in-house funds managed by the subcontractor. The preferential treatment should be less under the "incentive hypothesis" for subcontractors having a higher fraction of in-house funds. Inversely, the "inferior product" hypothesis predicts that for subcontractors having a higher fraction of in-house funds, the latter are more important and this raises their preferential treatment.

A more extreme version of the "inferior product" hypothesis leads to profit reallocation between in-house and outsourced funds. If that were the case, we should observe negative contemporaneous correlations between the two types of funds. Basically, superior performance of in-house funds is subsidized by outsourced funds. Under the incentive hypothesis however, preferential treatment can be seen as an in-kind compensation with the tacit agreement of the Principal and contemporaneous returns between the two types of funds should be positively correlated. Finally, preferential treatment can be seen as a substitute for sub-advisory fees. The incentive hypothesis entails a positive relationship between sub-advisory fees and outsourced performance. .Moreover, the relationship between affiliated in-house and outsourced funds is expected to be negative.

The empirical results are the following. Fund families that share a common language with the management company perform better and the difference is about 2.5% per year! The impact is even stronger if we focus on cross-border relationships between fund families and management companies. This might be related to higher information asymmetry due to cultural and geographical distance. When a management company has a higher market share in a given outsourced investment style, the preferential treatment also tends to be higher.

If we measure the fraction of outsourced funds as the ratio of the aggregate TNA of outsourced funds run by the management company to the aggregate TNA of all funds run by the management company, there is a negative relationship between the performance gap and the fraction of own account activity of the management company. Superior performance of in-house funds is not associated with contemporaneous poor performance of affiliated outsourced funds. Sub-advisory fees bear a positive relationship with outsourced fund performance. A percentage point increase of sub-advisory fees goes together with a 2% performance increase. Broadly, the results suggest that preferential treatment and sub-advisory fees are substitutes.

Even though, not much has been written on those topics, those studies are extremely important from a geo-strategy viewpoint, especially for small open economies.

Dr. Michel VERLAINE
ICN Business School
Head of the Banks, Funds and Markets Master specialization
Michel.verlaine@icn-artem.com

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Investir dans le numérique

Par Stéphane LAGO, spécialiste en investissement dans les actions thématiques (AXA Framlington Thematic Equities), AXA Investment Manager

La numérisation bouleverse non seulement les processus de production mais aussi le monde du travail. Les investisseurs qui souhaitent tirer parti des opportunités offertes par le virage numérique doivent adopter une nouvelle approche.

De nos jours, humains et robots travaillent déjà en bonne intelligence, les processus automatisés font partie de la routine et l'intelligence artificielle ou les chatbots révolutionnent les processus de production et l'interaction avec les clients. Les tâches répétitives ou dangereuses sont automatisées ou déléguées à des robots.

Aucun doute : la numérisation progresse rapidement. Elle bouleverse non seulement les chaînes de valeur et modèles commerciaux traditionnels, mais aussi le monde du travail. Cette évolution rapide offre des opportunités très intéressantes mais nécessite de nouvelles compétences de la part des employés, qui doivent revoir la manière dont ils gèrent ces technologies. Il s'agit alors de faire preuve de curiosité et de souplesse et d'apprendre sans cesse.

Tirer parti de la numérisation

Les applications en robotique et l'automatisation des processus dans les industries les plus variées permettent aux entreprises de produire de manière plus sûre et plus efficace. L'intelligence artificielle peut par exemple servir à éliminer de manière anticipée les possibles sources d'erreurs. La notion de «maintenance préventive» joue à cet égard un rôle central : l'enjeu est de détecter avant qu'ils se produisent les écarts dans le processus de production afin d'éviter des interrup-

tions coûteuses. Dans le domaine des soins, des robots sont de plus en plus souvent utilisés pour effectuer des opérations et des systèmes de surveillance mobiles indiquent quand un patient a besoin d'aide. Le transport des personnes et marchandises va être modifié en profondeur et les nouvelles technologies vertes pourraient s'avérer très bénéfiques pour la société.

Dans l'agriculture, des tracteurs autoguidés optimisent le processus de production. Des drones surveillent les surfaces arables et les dispositifs d'arrosage sont gérés de manière intelligente, ce qui est particulièrement important si l'on considère qu'à l'échelle mondiale, 70% de l'eau potable est utilisée pour l'agriculture. En marketing, l'intelligence artificielle permet à une entreprise de mieux comprendre ce dont ses clients ont vraiment besoin. Les chatbots permettent quant à eux de personnaliser le service à la clientèle, d'améliorer le degré de satisfaction et de mieux fidéliser les clients.

Les frontières sectorielles s'effacent

Les entreprises qui veulent poursuivre sur la voie du succès doivent faire preuve de souplesse et appliquer de nouveaux modèles commerciaux. Elles doivent miser sur la numérisation afin de garder le contact avec leur clientèle et ses besoins évoluant rapidement. Le virage numérique effaçant les frontières entre les secteurs habituels, les investisseurs devraient se focaliser sur des thématiques prometteuses et non sur une approche sectorielle. L'innovation est omniprésente et concerne tous les secteurs.

Nombre d'entreprises ne peuvent plus être rattachées à un secteur en particulier : un fabricant de montres connectées qui enregistrent la fréquence cardiaque et peuvent être jumelées à divers appareils mesurant le taux de glycémie est-il une entreprise technologique ou un prestataire de soins ? Le secteur automobile ne produit plus seulement des voitures. Il compte aujourd'hui des entreprises qui développent des technologies vertes ou des techniques d'automatisation pour une conduite autonome. Même des entreprises qui répondent aux besoins des consommateurs connectés en développant des produits de personnalisation et permettant un jumelage à des smartphones peuvent faire partie du secteur automobile.

Analyser la chaîne de valeur

Il y a lieu de tenir compte de toutes les entreprises qui opèrent au long de la chaîne de valeur d'une thématique d'investissement. En font partie, outre les entreprises sur le devant de la scène en raison de leurs technologies ou modèles commerciaux résolument novateurs, des « facilitateurs », dont la technologie permet tout simplement de telles découvertes et produits. Les fournisseurs de telles solutions peuvent être des entreprises de grande envergure ou de taille plus modeste, par exemple des fabricants de semi-conducteurs ou des prestataires de solutions révolutionnaires en infonuagique. Les technologies innovantes et disruptives ont pénétré tous les domaines.

Cinq thématiques de croissance à long terme s'avèrent particulièrement prometteuses en lien avec la numérisation. Le vieillissement et le mode de vie sont les résultantes de l'évolution démographique. En font partie des entreprises dont les produits et prestations ont un lien avec le vieillissement de la population – de l'aménagement intérieur des hôpitaux aux EMS en passant par des bateaux de croisière. L'univers des sociétés en mutation signifie intégrer des centaines de millions de personnes de pays en voie de développement et émergents à l'économie mondiale.

Pour ce qui est du consommateur connecté, l'élément central est l'interaction entre l'entreprise et le client. L'automatisation se concentre quant à elle sur la numérisation des processus et enfin, les technologies vertes offrent des solutions ménageant le climat et permettant une gestion durable des ressources.

Une sélection active des titres sur la base d'une analyse approfondie est nécessaire, car les entreprises ne seront pas toutes couronnées de succès et aucun indice pouvant être répliqué n'est disponible. Les investisseurs doivent donc composer leur propre univers de titres, conformément à leurs thématiques d'investissement, ce qui demande une connaissance approfondie des thématiques d'investissement en question.