

# Embracing the automation of transfer pricing

Frank Schoeneborn and Divya Vir Rastogi of EXA AG discuss how the development of state-of-the-art operational transfer pricing solutions are enhancing the day-to-day work of tax professionals.

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When it comes to transfer pricing (TP), data collection for the documentation is usually a manual and painful process every year. Inconsistencies are commonplace, and an active steering of profit allocation along the global value chain seems to be fantasy. But nowadays, a new SAP (ERP, S/4HANA) add-on solution can help.

Tax experts have been struggling with data collection for TP documentation for many years. While it does not often take long to describe the TP system in master and local files on functions and risks and to select appropriate transfer pricing methods, in audits, ultimately it depends on the figures.

American engineer William Edwards Deming's famous quote: "Without data, you are just another person with an opinion" also applies unreservedly to transfer pricing.

In most cases, things start to get tough when it comes to compiling the figures in the documentation: the financial data available centrally in accounting and finance does not match the tax-related transfer pricing system in terms of structure and granularity.

Poor IT systems or the IT landscape are quickly accused of being the cause and the situation shows no signs of improving. So what exactly is the problem?

## View of the inter-company transactions

Initially, a transaction matrix is required that shows the volume of transactions charged within the group according to transaction groups.

The question to answer is: How much has which multinational enterprise (MNE) entity charged another group entity, and vice versa?

These amounts are to be split into the usual transfer pricing transaction types: Which of these were deliveries of goods, services, licenses, interest, for example? Of course, this can be broken down into even

greater detail. Deliveries of goods alone may include finished products, raw materials, semi-finished components or spare parts.

At the local level, data on margins and profits for each inter-company (IC) transaction and IC partner company are required. In addition, how much does a local entity earn at the bottom-line with deliveries and services to other entities within the group (outbound view), or how much does a company earn with the products purchased from different IC suppliers (inbound view)? In the case of supply chain hubs, both views are indeed relevant. This kind of profit analysis is often new – even to experienced controllers and accountants. Thus, the data model often becomes too complex for existing financial reporting systems to handle.

### The pain points

It is not unusual to encounter a situation in which the tax experts of the MNE or consultants engaged develop a TP system fairly quickly, identify the relevant IC transaction types, determine methods that are suitable according to the functional and risk profile, and also add an arm's-length parameter for appropriate profit levels using benchmarking studies. This planning work is subsequently rounded off by guidelines.

The problem eventually becomes painfully apparent when, at the end of a year, appropriate data has to be inserted into the transfer pricing documentation. The question of transaction-related data is not quite as easy to answer as it might first appear: How and from where are we to obtain data globally and consistently, such as breakdowns into corresponding transfer price transaction types for each IC partner? Experts from tax departments are now turning to accounting and finance for help.

In some MNEs, these processes are well established and controllers and accounting specialists know exactly what data the tax function needs. In other groups, controllers who are still relatively new to transfer pricing may not initially be well-versed with the tax-related terminology. Terms such as transactions, transaction relationships, segmentation and the like are all too misleading; controllers sometimes understand them to mean different things.

### The reporting problem

Once these finance specialists have understood what data needs to be collected consistently across the group, the answer is quite often: The reporting systems are not structured accordingly, the master data is not harmonised, the SAP, Oracle etc. and business intelligence (BI) structures are set up according to business areas, business units, lines of business or divisions, but they do not offer reporting according to tax-relevant transfer price criteria. What is the reason?

The existing enterprise resource planning (ERP), BI and consolidation systems have been built up over the past few

decades. Detailed functional requirements have been brought to the IT organisation by accounting and finance over the course of many years. Accountants wanted to prepare the monthly financial statement promptly at the end of the month (a 'fast close'), while group accounting experts requested automated reporting packages to enable them to post consolidation entries for the consolidated financial statements as quickly and efficiently as possible. Controllers have carefully weighed up which planning/forecasting and reporting systems are required to control the group, business unit, division or other cost or profit centre.

Accordingly, IT departments have configured the internal systems or implemented external software tools in such a way that the required reports can be generated in a stable, timely and consistent manner. Inevitably, specialised providers have become established over the years, offering a wealth of experience in this area. As a result, professional planning, reporting, consolidation and forecasting solutions have been created, offering a high degree of automation and value for the respective user groups.

Notwithstanding the level of maturity achieved in the cooperation between accounting, finance and the tax department with regard to transfer pricing, the question for all parties involved is how IC financial data can now be recorded and monitored efficiently. This is a relatively new requirement and one that requires a joint review by the IT organisation and other stakeholders to determine whether sustainable solutions are to be procured externally or developed internally as the data is required permanently and not on a one-off basis.

### The 'Office tools'

It is relatively easy to prepare transfer pricing documentation using dedicated tools or simply using 'Office' applications. Thus, software tools have been developed to ensure the efficient exchange of documents using workflow functionalities and to ensure content consistency using text modules. One challenge, however, almost always remains unsolved regardless of whether a professional transfer pricing documentation tool is used or just a collection of documents for the master file or local file: Where do the figures to be entered come from?

The common observation is that tax experts, such as controllers, load data from local ERP or BI systems and rework it manually before sending the result in a spreadsheet template to the headquarters for further processing.

The disadvantages are obvious. It is difficult to imagine that this data collection process will run without a hitch and there is little doubt that, on closer examination, inconsistencies will be found. Even a medium-sized corporation consists of a large number of sender-receiver relationships and the required data integrity and consistency along the global value chain will certainly not be achieved in this way.



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Before joining EXA in 2020, Frank Schoeneborn was a partner with EY for five years and advised experts from the fields of tax, accounting, finance and IT who deal with the operative implementation of transfer pricing in day-to-day processes and IT systems.

Before moving to professional services in 2015, he gained 17 years of industry experience, having worked in large multinational groups as a chief financial officer in the UK, as head of global divisional finance, and head of global operational transfer pricing management. He is a frequent speaker at international conferences, symposiums and is the author of several articles on operational transfer pricing.



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Divya Vir Rastogi is the CEO and co-founder of digital technology provider EXA.

His subject matter expertise covers the development of software solutions in various areas, primarily in the process and discrete manufacturing industries.

Before founding EXA in 2012, he held various leadership and management positions at SAP SE, among others, where he most recently served as vice president of SAP Custom Development in EMEA. Prior to that, he worked on the growth of the SAP Custom Development division in America.

### The ideal 'transfer pricing data lake'

A visionary idea would be to have a data structure containing all data records down to document level with regard to IC transactions. This would include all sales per sender-receiver relationship at 'line item' level so that the data linked to the material master can later be aggregated by transaction group. By combining the value chains on a technical level and linking the accounting data imported automatically by the extractor, for example, to the IC customers and vendors, consolidated earnings views for the entire group can be created. An integrated and transparent mechanism for the allocation of overhead costs ultimately allows analyses down to earnings before interest and taxes (EBIT).

This insight and transparency gives a whole new meaning to the concept of added value in the global value chain context. If a product were to pass through a number of companies in the manufacturing process, it would instantly be clear what profit was made on the (preliminary) product by which company at which preliminary stage. This analytical insight is not only useful for financial planning and analysis (FP&A), but can also be used for transfer pricing purposes. The extent to which the target margins are defined for tax

purposes were adhered to along the international and possibly multi-stage value chain would be clearly visible for each entity.

At a higher technical level, even the group accounting system could benefit, if it were possible to eliminate IC profits in the inventory values at product level with maximum granularity. In any case, the entire group could be evaluated from a transfer pricing perspective with regard to the 'target' value required by tax and the 'actual' value. If this data structure existed, it would also be easy to start a query and finally copy the result for each group company into the transfer pricing documentation.

### Proactive and dynamic inter-company price-setting

It is only natural that deviations from the budget occur in the course of business, no matter how well the annual IC volume within the MNE was planned in terms of quality and quantity. If actual data collection takes place only once a year to prepare the transfer pricing documentation, it only becomes apparent at the end of the year – usually when it is too late – that the actual results deviate from the desired tax results. Transfer pricing experts are aware of the risks

involved if discrepancies in the distribution of profits within the group are discovered. It is not always possible to find one-off effects as the cause and the question of a year-end adjustment often arises as a last resort. Most experts involved are sufficiently aware of the complex issue of end-of-year adjustments and the many difficulties they entail.

This raises another question: Besides the automated collection of data, how can a potential discrepancy be detected early on and, if necessary, countered during the course of the year? In a 'TP data lake', the necessary reports would have to be available during the year, monthly or at least after each quarter, in the same level of detail as they will later be required for the TP documentation.

Finally, a transfer pricing management tool with an underlying 'TP data lake' is required, which continuously extracts, analyses and reports all IC transactions, reports discrepancies early on, and signals as soon as action is needed. Above all, however, this tool should allow for agile intervention if deviations are detected during the year by means of price changes at the product or material level and to automatically write new price data back into the local ERP systems of the participating local entities.

### Multinational entities seem to have (almost) nothing

The results of a recent study in Germany, Switzerland and Austria showed that only very few companies use a professional IT solution that also covers only sub-processes (EY 2019).

Around two thirds of the groups surveyed use no other IT solution than an Office spreadsheet. Only in 7% of cases do companies have automated interfaces or connections to ERP or accounting systems. The same applies for central price databases for avoiding inconsistencies in internal accounting transactions. Only 7% already use their own or bought-in IT solutions that support the ongoing transfer pricing monitoring of profit margins from tangible goods transactions. No one knows whether this is due to the fact that no providers are yet established on the market or the solutions are not yet fully developed.

The software industry may not yet have recognised the need on a broad scale, because until now there has been barely any noticeable demand for these solutions. It has only recently become clear that in the course of the discussion on digitisation, automation and standardisation, but also under the pressure of intensive tax audits, the issue of data availability and consistency is becoming increasingly important.

In view of the upcoming digital transformation projects, companies are therefore also asking themselves: How can transfer pricing management be automated?

### 'Operational transfer pricing' SAP add-on

Until now, only a handful of software companies worldwide have actually taken up the issue and developed tools for

transfer pricing management. As an example, one such company is EXA AG, a partner of SAP SE, which offers a highly-integrated solution: EXA OTP 2.0.

EXA OTP 2.0 features an IC map with flow charts for a group overview, which also allows users to drill down to individual product level, if required. Users can branch inter-actively to a management dashboard or also to the segmented profit and loss (P&L) statements of the entities. The steps required to update prices in the event of deviations, for example, by means of an approval workflow at product level are part as well. A wide range of configuration options, such as cost allocation rules or the flexibility of storing the transfer pricing data model with transaction groups and related profit level indicators (PLIs) is also part.

For the user interface, the solution relies on the web standard SAP Fiori. This provides a uniform, modern appearance that is practically indistinguishable from other SAP applications such as SAP S/4HANA, thereby greatly reducing familiarisation periods. With the SAP Fiori My Inbox, the solution also relies on a powerful and easy-to-use approval concept for workflows with which S/4HANA system users will soon become familiar. The solution also offers a standard set of data analytics reports that can be flexibly expanded and adapted to suit specific company requirements.

The solution was certified by SAP SE for integration with SAP S/4HANA and is, therefore, based on the well-known high-performance HANA database. The application uses established SAP technologies and offers interfaces to the financial data via standard extractors avoiding regular and manual loading of flat files. Options are available for data management for smaller, often 'non-SAP' companies. Multi-dimensional role models can be defined for authorisation and authentication, and integration into the customer's Single Sign-On strategy is not a problem. Installation is possible 'on-premise' and in a 'cloud' environment.

### The business case

The acquisition and implementation of any operational transfer pricing software solution requires a certain budget and internal resources.

It is recommended to carry out a net present value (NPV) analysis before to weigh up the costs and benefits. Parameters would be the existing IC flows and volumes offset by the group entities involved, as well as their tax rate. Analyses of the historical variances in profit, as well as the customs and income tax consequences, form the reference points for the amount that the MNE has to pay in the status quo for transfer pricing year after year.

The alternative scenario is to introduce a third party or in-house developed software tool. This includes acquisition or programming costs, customising, implementation and ongoing operation. Once it is live, that would result in a reduction of variances in the distribution of profits.

In addition, resources would be freed up due to efficiency gains and consulting expenses may be reduced in case of disputes. By comparing both scenarios, it is finally possible to reliably assess the level to which an investment makes sense from a compliance point of view and a purely economic standpoint. Depending on the parameters set, the positive net cash effect at MNE group level ultimately determines the amortisation period of such a project.

### Summary

State-of-the-art operational transfer pricing solutions do consolidate all financial data related to TP on an ongoing basis throughout the year for the entire group. This includes all data from the profit and loss accounts, as well as the granular information from the single IC invoices with quantities and prices.

By linking the relevant product master data and accounting information, a standard reporting system for transfer pricing is provided that includes segmented P&L reporting plus transaction matrices. This allows the operational transfer pricing manager to intervene during the year if deviations occur. Automatically generated forecast calculations help to assess the expected local profit development.

Furthermore, simulation functionalities are extremely helpful in this respect. Suggested values for new product

prices can be discussed cross-border via integrated workflows. As soon as new prices have been approved, they can be sent back to the sender's ERP system automatically and simultaneously to the recipient's system.

Appropriate operational transfer pricing tools can be used to proactively control the distribution of profits within the MNE during the course of the year, enabling the entities to achieve arm's-length profit ranges for each type of transaction and transfer pricing method.

At the end of the year, it is now easy to export the data records from the system and insert them into the local transfer pricing documentation. This will ultimately eliminate all known weaknesses when compiling the figures.

The tedious manual collection of data together with the insight that local earnings do not meet the expectations becomes a thing of the past; similarly, weaknesses in data granularity, such as the fact that profits cannot be broken down by IC supplier or by IC customer per transaction type, are also history. This provides transfer pricing managers with sufficient reference points to demonstrate the advantages of the investment together with IT. Once an operational transfer pricing solution has been implemented live, it becomes a key success and compliance factor for any transfer pricing manager around the world.



## EXA OPERATIONAL TRANSFER PRICING

# Ensuring compliance while managing all data and reporting aspects of Transfer Pricing

- ✓ **SEGMENT YOUR LEGAL ENTITY P&Ls**  
according to tax needs by Transaction Groups, Functions and Partners
- ✓ **ALLOCATE OVERHEAD COSTS**  
flexibly or automatically on account level while considering pre-allocations from SAP ERP
- ✓ **VISUALIZE INTERCOMPANY FLOWS**  
and deep-dive into TP-related value chains for intuitive and user-friendly analysis
- ✓ **REDUCE RISKS AND LOSSES**  
resulting from double taxation, interest payments for tax arrears and penalties
- ✓ **MONITOR ALL IC TRANSACTIONS**  
almost real-time during the year and detect deviations early
- ✓ **GET DATA FOR TP-DOCUMENTATION**  
ready at the year-end and feed it easily to master or local country files
- ✓ **FORECAST TP DEVIATIONS**  
and simulate required price updates by utilizing advanced analytics technologies
- ✓ **DRAMATICALLY SAVE TIME AND RESOURCES**  
by avoiding manual data collection and preparation
- ✓ **RECALCULATE TP's FOR TARGET RANGES**  
considering inventories and approve new TP's via workflows before uploading to ERP
- ✓ **SEE THE FULL PROCESS AUDIT TRAIL**  
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Operating globally, EXA offers proven solutions and cost-effective services to clients mainly in the manufacturing and process industries. Headquartered in Germany, EXA has global presence with offices in Europe, India and the USA.