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PROCOMP INFORMATIC: STEPPING ON ETHICAL LANDMINES IN ASIA[1]

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ETHICS IN ITS BROADER SENSE deals with human conduct in relation to what is morally good and bad, right and wrong. It is the application of values to decision making. These values include honesty, fairness, responsibility, respect and compassion.

—Rushworth Kidder, president, Institute for Global Ethics[2]

Once touted as a "king of stocks", Procomp Informatics Ltd ("Procomp" hereafter), Taiwan's first gallium arsenide epitaxial (GaAs) wafer foundry, defaulted on a bond payment worth US$89[3] million despite financial reports showing that it had US$180 million in cash. After Sophie Yeh, the company's chairwoman, failed to give a convincing explanation, the mystery led to an investigation and the discovery of a string of accounting frauds and scandalous conduct. This case describes the various manipulation methods used by Procomp in its creative accounting practice prior to and after its initial public offering in 1999. It also discusses collusion among the board members, senior management and accounting and financial officers within the company. The ultimate collapse of Procomp in mid 2004 was regarded by Taiwanese regulators as Taiwan's version of Enron because of the huge amount of embezzlement (approximately US$213 million) and the number of people involved, including foreign companies and banks. It was a giant blow to Taiwan's attempt to attract foreign investment and to compete with its often politically volatile neighbor, China, as an investment target (Rose 2004). The scandal in Procomp raised the concern of corporate governance and risk management in Taiwanese companies. It also called attention to the professional ethical principles and standards that accountants and finance managers within a company should adhere to, as well as top management's responsibility for setting an ethical tone in the company and practicing it.

TAIWAN'S GAAS FOUNDRY INDUSTRY

In the late 1990s, industry insiders perceived the gallium arsenide (GaAs) wafer foundry as a future star business while awaiting the arrival and rapid expansion of the advanced third-generation (3G) mobile phone service. GaAs, a kind of

1 This case was developed from publicly available information solely for discussion purposes and does not purport to be a complete and accurate recounting of all relevant facts, events and conditions

2 Cited in official website of Institute of Management Accountants (IMA). http://www.imanet.org/about_ethics.asp (accessed 1 November 2006)

3 US$1 = NT$ 33.06 on 12 February 2007

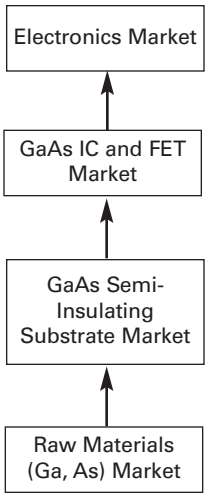
compound semiconductor,[4] which determines the length of talk time in digital mobile phones, was the leading technology for power amplifiers in the handset market. GaAs epiwafers,[5] serving as the basic components of GaAs-devices (e.g., GaAs IC), were widely used in optical communications and wireless communications products such as mobile phones,[6] satellite communications systems and wireless networks. These epiwafers with GaAs elements needed to be produced in a foundry which employed advanced technology and required many expensive devices to function. Many technologies, such as pseudomorphic high electron mobility transistors (pHEMTs), heterojunction bipolar transistors (HBTs) and metal-semiconductor field effect transistors were used to produce GaAs epiwafers. Common deposition techniquesadopted were Metal Organic Chemical Vapor Deposition (MOCVD), Molecular Beam Epitaxy (MBE) and Vapor Phase Epitaxy (VPE). The cost of building a new foundry was estimated at over US$1 billion. (Figure 1 shows the vertical integration of the GaAs industry.)

Numerous Taiwanese enterprises entered the GaAs foundry business in the late 1990s, including the Advanced Wireless Semiconductor Corporation (AWSC), Global Communication Technology Corporation, Hexawave Photonic Systems Inc, Suntek Compound Semiconductor Corporation and Win Semiconductors Corporation. They envisioned that overseas OEMs and chipmakers would outsource their GaAs production requirements worldwide and that this would resemble the trend in the silicon foundry industry that evolved and flourished back in the early 1990s[7] (Lapedus 2005).

Due to intense competition among firms in high-tech industries in Taiwan, great effort was put by market players into development and enhancement of technological capabilities. A common phenomenon in the information technology ("IT") industry in Taiwan was for high-tech companies to adopt "low base salary with higher stock bonus" incentive schemes to attract and retain innovative employees. This compensation approach was regarded by IT industry players

Exhibit 1

Vertical Integration of GaAs Industry



Source: Unknown author, "Gallium Arsenide (GaAs): About the Market", http://www.macom-gaaswafers.com/market.html (accessed 5 November 2006).

4 Unlike silicon, which is a single-element semiconductor, compound semiconductors do not appear in nature. Rather, they are synthesised using multiple elements. For example, the compounds of Group II (Zn, Cd, Hg) and Group VI (O, S, Se, Te) could be ZnS, ZnSe, ZnTe, CdTe, HgTe or CdHgTe. The range of possible formulae is quite broad and includes binary (two elements, as in GaAs), ternary (three elements, as in InGaAs) and quaternary (four elements, as in InGaAsP) elements. For further reading, refer to http://en.wikipedia.org/wiki/Compound_semiconductor (accessed 10 November 2006).

5 The epiwafers were grown through epitaxy on GaAs substrates and were then used to manufacture GaAs devices. Many technologies, such as pseudomorphic high electron mobility transistors (pHEMTs), heterojunction bipolar transistors (HBTs) and metal-semiconductor field effect transistors were used to produce GaAs epiwafers. Common deposition techniques adopted were Metal Organic Chemical Vapor Deposition (MOCVD), Molecular Beam Epitaxy (MBE) and Vapor Phase Epitaxy (VPE).

6 A typical mobile phone handset can contain six or seven GaAs chips, providing the high-speed switching devices, the power and the low noise amplifier functions.

7 The trend indeed led to a silicon foundry industry dominated by the Taiwan Semiconductor Manufacturing Company (TSMC) and Taiwan's United Microelectronics Corporation, the world's two largest semiconductor manufacturers in terms of wafer output. The strength of a GaAs device lied on its ability to generate less noise and had a faster transmission speed than most other types of semiconductor components, and was more resistant to high voltage than silicon semiconductors.

in Taiwan as one of the most effective mechanisms to induce employees to act in the best interests of their companies, and was said to be a major factor in helping Taiwan's high-tech companies become globally competitive (Kuo et. al. 2006). Based on the distributable net income , the percentage of employees' stock bonuses, either in cash or common stock, was set at a fixed percentage or a certain range. According to Taiwan's financial reporting standards, the stock bonus paid to employees should be reported as a distribution of earnings in the statement of changes in equity instead of being recorded as a compensation expense in the income statement. In other words, the higher the reported earnings, the higher the bonus employees could receive. This accounting practice of not treating employee bonuses as an expense item was widely adopted by IT companies in Taiwan (Chen et. al. 2005).

PROCOMP INFORMATICS LTD

Procomp was established in Taiwan in 1991 by Sophie Yeh as an importer of computer accessories and later diversified into the wireless communications and compound semiconductor business. It served as an OEM (original equipment manufacturing) and ODM (original design manufacturing)[9] supplier for many famous computing and IT companies for several years. The company's mission was:

- to become the leading solution provider for the 3C (i.e., computer, communications and consumer electronics) industries
- to maintain its position as a pioneer in the compound semiconductors sector, focusing on communications devices that build interfaces between computers and consumer electronics
- to pursue both new product technology and new process and manufacturing technology.

Procomp was listed on the Taiwan Stock Exchange in December 1999 and within four months of listing, its share price escalated to US$11.15 from the initial price of US$2.97, earning for itself the title of "king of stocks". During the same time period, Procomp claimed its record achievements in sales US$130 million, growing 115 percent from the previous year, and earning a net profit of US$11.2 million.[10] That same year, Procomp was selected as one of Taiwan's 50 fastest-growing companies by Commonwealth Magazine, one of Taiwan's largest monthly business magazines, and won the National Award for Small and Medium Enterprises from the Ministry of Economic Affairs.

By 2000, the company had 600 employees worldwide and a number of overseas branch offices in Germany, Austria, Hungary, the Netherlands and the US. Its manufacturing facilities were located in Taiwan and overseas warehouses in California and the Netherlands. Apart from the 30 branches and local business associates in Taiwan, Procomp had also set up more than ten upstream and downstream associates overseas. As an ISO-9002 certified company, it had the following two major business divisions:

COMPUTER BUSINESS DIVISION

Procomp started to branch out into motherboard and multimedia product manufacturing in 1995 with product lines ranged from motherboards, palm PCs for communications and information management, and a series of FireWire[11] products. Given its strict adherence to international quality control standards[12] throughout its manufacturing process, it earned the Taiwan's Symbol of Excellence Award for its motherboards and FireWire peripheral interface. Among the product lines, motherboards accounted for 80 percent of total sales in 1998. However, the production capacity in this line shrunk when the global market for computer motherboards became saturat-

8 Article 235 of Taiwan's Company Law stipulates that companies with net earnings shall cover their prior years' accumulated losses first. Then, they must set aside 10% of their annual reported earnings as legal reserves before distributing dividends and employee bonuses. The surplus of net income is called "distributable net income".

9 Instead of producing finished products and marketing them, OEM generally involves making products based on a value-added reseller's (VAR) needs and design. The products made will then either be resold or be incorporated into another product using the reseller's brand name. ODM (original design manufacturing) is another common model adopted by Taiwanese manufacturers in recent years in which products are designed in-house and are sold under other brand names by the VARs.

10 Cited at Taiwan Ministry of Economic Affairs, "Procomp: A Pioneer In Taiwan's Compound Semiconductor Industry", ROC website, http://www.moeasmea.gov.tw/Eng/guidance/f04-b0i.html (accessed 1 November 2006)

11 FireWire is the proprietary name of Apple Computer for the IEEE 1394 interface. The use of a FireWire interface in audio devices, for example, allows data transfer and device powering with one cable.

ed. Procomp's motherboards experienced the worst gross margin deterioration[13] and pushed Procomp's determination to shift its strategic focus to the compound semiconductor business.

COMPOUND SEMICONDUCTOR DIVISION

The compound semiconductor division was founded in 1996 at Taiwan's Hsinchu Science Park, one of the world's leading sites for semiconductor manufacturing. The division led the company's design and R&D efforts in microwave communications, optical communications, LDs[14] and LEDs[15] Much of its research was funded internally and amounted to at least 5 percent of annual revenue. Since its launch, the company continued to grow rapidly, demonstrating the aggressive and innovative spirit of Taiwanese enterprises. Joint ventures were formed to enhance GaAs epiwafer and device development. This included the establishment of Suntek Compound Semiconductor Co. Ltd ("Suntek") in 2000 after a merger with BenQ, the nation's largest mobile phone maker. Through the co-development with Mitsubishi Electric, Procomp became Taiwan's first GaAs, pHEMT and HBT epiwafer foundry. In 2002, it was Taiwan's largest maker of GaAs epitaxial-based communications chips, primarily used in mobile phones. GaAs epiwafers accounted for less than 15 percent of Procomp's total sales in 1998; however, it comprised almost 30 percent of the company revenues in 2001. Supra Opt Inc (Supra), the Procomp's joint venture with Sumitomo Electronic in 2003 also successfully produced the first ZnSe[16] white LED, which outperformed the conventional white LED. [See Table 1 for Procomp's Milestones]

Tabe 1

Procomp's Milestones

1991	• Founded as a computer accessory trading company with US $160,000 capital
1992	• Introduced own brand of interface cards, SCSI • Cooperated with Japanese company, SoftBank
1995	• Increased capital to US$2 million • Implemented SMT automation equipment • Started manufacturing multimedia products
1996	• Manufactured computer motherboards • Established compound semiconductor division in Hsinchu Science Park
1997	• Introduced first GaAs epiwafer in Taiwan • Received ISO 9002 certification
1998	• Raised US$23 million in capital • Built 170,000 square foot computer factory • Received US, UL and IECQ certificates • Signed an OEM contract with Japan's Sumitomo Electric Industry
1999	• Received ISO 9001 certification • Recognized by Common Wealth magazine as one of the 50 fastest-growing companies in Taiwan • Won National Award for Small and Medium Enterprises • Appeared on Taiwan's stock exchange
2000	• Suntek Compound Semiconductor Company, a HBT foundry, was established under a joint venture with Mitsubishi Electric
2003	• Established Supra Otp Inc, a joint venture with Sumitomo Electronic • Produced first white ZnSe white LEDs

12 Apart from applying surface-mount-technology (SMT), which are automated lines to facilitate production capacity, Procomp had adopted two fundamental production and quality control concepts, the design verification test and the manufacturing verification test, from the first stages of the production process. In addition, the company attached great importance to product quality throughout the manufacturing process by strictly adhering to Internal Quality Control (IQC), Independent Product Quality Certification (IPQC) and Operational Quality Control (OQC) standards.

13 Vickers Ballas Investment Research and Primasia Research (24 September 2001), Taiwan Equity Research on Procomp Informatics Ltd (Code:2398): Sticking to Its Guns", http://www.primasia.com/Research/taiwan/update/240901update2398.pdf (accessed 15 November)

14 A laser diode (LD) is a laser where the active medium is a semiconductor similar to that found in a LED. For further explanation, refer to http://en.wikipedia.org/wiki/Diode_laser (accessed on 10 November 2006).

15 A light-emitting diode (LED) is a semiconductor device that emits incoherent narrow-spectrum light when electrically biased in the forward direction. The LED development began with infrared and red devices made with gallium arsenide. For further explanation refer to http://en.wikipedia.org/wiki/LED.

SOPHIE YEH'S LEADERSHIP

Sophie Yeh, Procomp's chairwoman of the board and its CEO, held a master's degree in economics and a bachelor's degree in French. She set up Procomp in Tamshui, a Taipei county, with US$160,000 as the initial capital in 1991. Although she was not a technology expert, with her anticipation of the growing demand for wireless communication devices globally and the assistance of Clark Peng, a communication materials expert, she ventured into the high-end field. At the time, the company was regarded as a pioneer in the niche market segment since most of the industrial players in Taiwan were only familiar with the silicon wafer foundry led by the top semiconductor producer, TSMC (Wang 2004).

When GaAs epiwafers were first introduced to the Taiwanese market, Yeh received a poor response and support from investors was weak because these products were considered too advanced and complicated. Nevertheless, the determination of Yeh and Peng helped them raise more than US$6.5 million for the company in 1996. Yeh once said, "We put our wholehearted efforts into it [GaAs development], it would have been God's will if we did not succeed" (Wang 2004:11). Procomp began its compound semiconductor operations in 1996, and within three years, Yeh had successfully turned the company from a computer accessories trading company into Taiwan's first compound semiconductor maker and the fifth largest microwave epiwafer manufacturer in the world. Yeh believed that the success factor in running a business, particularly in the fast-paced IT industry, was to know what had to be done, to be insistent and to get the right people to do it at the right time.

EMPLOYEE TRAINING AND INCENTIVE SCHEME

Under Yeh's management, employees were considered as great assets that could bring extraordinary value to the company if their talents were allowed to flourish. A series of comprehensive training and promotion schemes were implemented under a guiding principle of "placing the right talent in the right position" to explore each employee's greatest potential. Procomp had high expectations of the employees' technical performance given the company's effort in training them. She expected employees to know the specific business and quality objectives of their daily work. There were processes in place to define the knowledge levels and skills required to meet those objectives successfully. A benefit committee was also formed in Procomp to counsel employees on their psychological health and legal issues.

Following other high-tech companies in Taiwan, Procomp also implemented the employee stock bonus plan as the incentive scheme in the company. Based on the firm's stock performance and board control, the board of directors proposed the percentage of employees' stock grants.. Procomp believed that the employee stock bonus plan was a good way to attract, motivate and retain excellent company executives while improving the company's operating performance.[17]

PROCOMP'S COLLAPSE

In 1999, industry analysts estimated that sales of compound semiconductor devices would reach US$10 billion by the end of the year and that the global market for GaAs epiwafers would be worth US$450 million in 2000 due to the anticipation of increasing market demand for wireless communication technology.[18] Nevertheless, GaAs demand receded in late 2000–2001 due to a slowdown in the telecommunication industry, and 3G mobile service launches were held back. Overcapacity and depressed market prices caused delays and cancellations of some governmental and corporate projects which were meant to expand existing foundries.

16 Zinc selenide (ZnSe), is a kind of semiconductor with a light yellow binary solid compound, used as an infrared optical material with a wide transmission wavelength range. For further explanation, see http://en.wikipedia.org/wiki/Zinc_selenide

17 As a further note, Procomp's net income after tax in 1999 was US$10.3 million. In March 2000, when the company achieved its record high share price, it issued stock bonuses worth a total of US$30 million at the market value then. However, assuming the amount had been treated as expenses, it would have meant that the company was actually experiencing a loss even during its peak time. Refer to Lu, C.F. (November 2004) "Keys to Avoid 'Land Mine' Companies: How to Identify a Good Company", Cheers Magazine, http://www.cheers.com.tw/content/052/052068.asp (accessed 18 November 2006).

18 Cited in Taiwan Ministry of Economic Affairs, "Procomp: A Pioneer in Taiwan's Compound Semiconductor Industry", ROC Website http://www.moeasmea.gov.tw/Eng/guidance/f04-b0i.html (accessed 1 November 2006).

Despite the slowing down trend, Procomp's new foundry became operational in 2000 and the firm aimed to expand the production capacity through acquiring more reactors by mid-2002. In the second quarter of 2001, Procomp's sales of GaAs epiwafers were up 25 percent; however, its gross margin dropped to 36 percent from 50 percent in the first quarter. The contraction was due to a 15 percent decline in the utilization rate and a sharp drop of 20 percent in the yield rate due to volume production of new reactors and product ramping. Procomp's debt-to-equity ratio increased to a high level of 86 percent by the end of the second quarter of 2001.

In October 2001, Procomp began new production through technology transfer and foundry agreements with Mitsubishi Electric, which guaranteed 30–50 percent of initial orders, while US-based shareholder Celeritek guaranteed 20 percent. Unfortunately, Suntek delayed construction of a second foundry from the third quarter of 2001 and faced the threat of closure due to a lack of support from major shareholders. While industry capacity expansion was on the go (rising by more than 200 percent in 2001), order cancellations from the US and European markets resulted in a US$24 million loss in 2003 instead of the forecasted profit of US$5 million (III-Vs Review 2005). In the first half of 2004, Procomp further lost about US$18.2 million on revenue of US$3 million. In the second half of 2004, Procomp ceased trading. Yeh admitted the mistake of building a complete supply chain without support from either the government or any conglomerate, blaming the industry environment for her company's collapse. The company's diversification into unfamiliar areas such as GaAs was pointed out by some market analysts as one of the reasons for Procomp's losses (Central News Agency 2004).[19]

Yeh claimed that, in order to pay the company debts and finance Procomp's operation and expansion, she had to use US$186 million of Procomp's cash to invest in options overseas and she lost the options investment completely. After suspending an overseas share sale that had raised only about 50 percent of an estimated US$117 million, Yeh filed a restructuring proposal in a local district court on 14 June 2004 to put Procomp's assets in receivership in order to protect it from creditors' seizure. In the proposal, she claimed that Procomp was unable to maintain solvency due to the cash crunch on the failure of its overseas share sale.

The request for court receivership (equivalent to bankruptcy in the US) was made a week before the maturity date for a US$89 million European convertible bond (ECB) payment, despite US$180 million being recorded on its books as liquid assets. Yeh failed to explain why the company defaulted on the bond payment in spite of sufficient cash appearing in its account. "The approximately US$181.7 million fund is derivative instruments on our foreign accounts. The money was frozen because of certain special terms. Since I'm not a financial expert, I can't give you a clear answer about exactly what the derivative instruments are", Yeh responded at a press conference on 16 June 2004 (Wang 2004).

Procomp's sudden move on the receivership stunned the 1,600 bondholders and 38,000 shareholders of Procomp. The company soon became the subject of an investigation by Taiwan's Financial Supervisory Commission (FSC) that involved probing into the financial statements of 18 listed companies (Ridley 2004). While Procomp's fall was due primarily to its unwise corporate decision marking and poor investment strategy, the application for receivership exposed the complicated and hidden accounting scandal behind Procomp. In the wake of the receivership application affair, Taiwan market regulators suspended trading of Procomp stocks and ordered its delisting from the Taiwan Stock Exchange on 23 June 2004.

In contrast to Procomp's initial share price of US$2.97 in December 1999 and US$11.15 in April 2000 on the Taiwan Stock Exchange, a sharp drop to a record low US$0.19 was reported on the last trading session in 2004 before the company was suspended from trading. A record high of over 10,000 complaints from stock investors were received by Taiwan's Securities and Futures Investors Protection Centre (SFIPC),[20] seeking compensation of more than US$173.3

19 The GaAs foundry business became a niche and had been largely consolidated following over-estimated sales and a slowdown in the wireless communication market. Some Taiwanese companies, like Suntek Compound Semi-conductor Co. Ltd. and Hexawave, had reportedly quit the market. In 2006, the big players in the global GaAs foundry were AWSC and Win from Taiwan, TriQuint from the US and Sumitomo Electric from Japan. Many GaAs epiwafer makers had diversified into or refocused on opto markets and illumination and began producing, for instance, GaAs-based LEDs, lasers and other component-based blue and white LEDs. By 2007, Taiwan had become one of the world's top-three centers of high-brightness LED chip making and epiwafer fabrication.

20 A special division set up with court approval soon after the Procomp incident. For further information about SFIPC, refer to http://www.sfipc.org.tw/.

million from Procomp in October 2004. According to the SFIPC, an average of 200 calls per day was made by Procomp investors seeking legal counsel on how to recover their losses during the crisis.[21] The company was also found to owe US$179 million in bank loans to more than ten local lenders.

Yeh, who held the greatest responsibility in the scandal, was detained three days after the delisting. Thirty other executives of the company, including the financial controller, general manager, and board members who had been suspected as Yeh's accomplices, were questioned and prosecuted. Other parties implicated in the scandal, such as accountants, underwriters and banks, were also investigated and held accountable for negligence in the investors' compensation lawsuit (Huang 2004a).

THE INVESTIGATION

On 24 June 2004, local prosecutors raided the offices of Procomp, carrying away an estimated 40 boxes of documents to be examined. It was reported on 17 July 2004 that Procomp had worked with five of its Hong Kong-based sales agents[22], to increase its account receivables (Huang 2004b). Four of the five agents were unregistered companies in Hong Kong and only one was registered in Hong Kong in 2003 after having made deals with Procomp for the past two years. The head of the commission's Securities and Futures Bureau (hereafter SFB) told the media that the company's US$180 million worth of financial derivatives were actually frozen because of unlawful financial practice (Huang 2004b).

MANIPULATION METHODS

According to the SFB, Procomp used part of the US$180 million fund as collateral for bank loans granted to its foreign associates, who in turn agreed to buy convertible bonds issued by the company. In addition, these banks were given authorization by Procomp to use the funds to buy financial derivatives while Procomp sold fake account receivables to the banks. Since its receivables could not be realized, the banks later froze Procomp's savings. SFB also discovered an indication of insider trading among Procomp's top management when it was found that false domestic and foreign accounts were used to manipulate the company's stock liquidity. According to the FSB, Procomp had falsified trading invoices with several fictitious companies to boost its revenues from 1994, even though there was no indication of activity in Procomp's purchase records. This enabled the company to apply for loans from banks and compile promising financial reports before the IPO.

Yeh was able to conceal the illegal operation by first ordering Procomp employees to falsify shipment records, and then persuading them to conceal the scam with large cash handouts (CompoundSemiconductor.Net 2005). The money given was presumed to be recorded as bonuses to employee as the company had indeed offered extremely high bonuses in 2000, when the market value of these bonuses was 289.22 percent of Procomp's net income (Chan et. al. 2005). After the company was successfully listed, its top management continued its tricks to maintain the company's growth and raise capital as well as generate personal gain, while creating fake accounts to manipulate the stock. Based on several indictments and press reports, the following four major approaches were identified as ways Yeh and her management team had adopted to embezzle the company's funds or to generate profit from the securities markets (Liu 2004).

(1) Fabrication of Overseas Transactions

Yeh's fabrication of export/import transactions had taken place since 1994, before Procomp got listed on the Taiwan Stock Exchange. In an attempt to window-dress the financial statements so as to get listed and impress investors, an estimated US$334 million worth of revenues and associated accounts receivables per year were created through some 40 domestic and foreign paper upstream/downstream companies. As a result, within four months of being listed in December 1999, Procomp's share price increased by almost four times its initial listed price.

(2) Stock Manipulation through Insider Trading

Before the IPO and recapitalization, Yeh and her accomplices intentionally released favorable company information and used Procomp's funds to buy its company stocks to boost its stock price. Profits derived from the false transactions with the domestic and foreign fictitious companies were kept as personal gain.

21 Taipei City Government Official Website, "Prosecutors Expected to File Class-act Lawsuit against Tech Company", http://english.taipei.gov.tw/TCG/index.jsp?recordid=2514 (accessed 18 November 2006).

22 A paper company in this case is defined as a company that exists on paper only for corrupt financial purposes

Manipulation of Convertible Bonds through Paper Companies

In between 2002 and 2003, Yeh issued US$50 million worth of European convertible bonds (hereafter ECB) and had her fictitious companies, registered under the names of Procomp's employees, buy them all. The funds that the fictitious companies used to buy ECBs were borrowed from two foreign banks that approved the loans based on Procomp's deposits. After converting all the bonds into Procomp stocks, the fictitious companies sold their shares to unwitting investors and channeled the proceeds to the accounts of Yeh's fake agents.

Arrangement of Credit Linked Notes (CLNs)

During this time, Yeh instructed a few fictitious companies overseas to buy corporate bonds issued by another foreign fictitious company using borrowed funds. In order to secure loans, Procomp funds, or fictitious accounts receivable, of those fictitious associates were used as collateral. The bond issuer then took out loans totaling US$85 million by issuing CLNs through a foreign bank. The proceeds were funneled again into Yeh's hands.

A number of past and present financial controllers and management accountants were involved in the scandalous activities that included:

- fabricating documents for fictitious companies
- booking sales to fictitious companies for non-existent transactions
- booking fake revenue for the company
- falsifying shipment records and invoices
- approving suspicious transactions and knowingly stamping questionable documents
- window-dressing financial statements to get listed
- submitting incomplete and inaccurate statements to external auditors
- providing misleading information to banks to secure loans
- spreading untrue company information to boost the company's stock price
- accepting bribes
- covering up or intentionally ignoring illegal activities of the company.

Questionable Corporate Governance

The investigation also uncovered that in March 2004, Deloitte Touche Tohmatsu (DTT) was hired by Procomp to replace its long-time accounting partner, KPMG. Before that change, the company also replaced one of two KPMG accountants who were in charge of Procomp accounts. The reason given by Procomp for changing its auditor was that a company was prohibited from employing the same accounting firm to certify its accounts for more than five consecutive years under the commercial accounting laws (Hu 2004). In fact, the law merely stated that a company was prohibited from employing the same accountant, not the same accounting firm, for five consecutive years. It was also learned that Procomp had refused to explain clearly the queries raised by KPMG regarding the account receivables and unusually high cash flow appearing in the company statements of the first quarter of 2004. Therefore, prosecutors believed that the conflict with KPMG had actually resulted in the termination of the auditor. This may raise suspicion on the existence of hidden transactions or accounting fraud behind the financial reports. Nevertheless, this suspicion was kept supressed. A constant change in the personnel within the company's accounting and finance team was also found. For example, in the years since 1998, Procomp went through at least four financial controllers (Chan 2006) who were believed to have left the company and sold all their shares in Procomp, knowing the unstable financial conditions of the company.

Other sources revealed that there was a lack of independence in Procomp's board, as many of them were Yeh's family, including her younger brother Yeh Meng-chuan, Yeh Meng-ping, and her close friends (Taipei Times 2005). Some of them also held executive positions in the company and the number of board members decreased over the years from the initial nine members in 1999 to four after 2003. Together with

23 A CLN is a structured security that combines a credit derivative and a regular bond. CLNs are created through a special purpose company (SPC), or trust, which is collateralized with AAA-rated securities. In other words, CLNs are issued by third parties and give credit exposure to a specified company. In exchange for taking the credit risk on the reference entity (Procomp in this case), the investor receives regular coupon payments either at a fixed or floating rate during the life of the note. At maturity, the investors receive the final coupon payment and principal back. In the case that the referenced credit defaults or declares bankruptcy, they receive an amount equal to the recovery rate. The coupon or price of the note is linked to the performance of a reference asset. It offers borrowers a hedge against credit risk, and gives investors a higher yield on the note for accepting exposure to a specified credit event. For further information, refer to http://www.investopedia.com/terms/c/creditlinkednote.asp (accessed 3 November 2006).

Tabe 2

Nepotism and Diminishing Shareholder Control at Procomp

Month/Year	12/1999	01/2001	03/2002	04/2003	02/2004
Percentage of the board family-controlled (A)	55.5%	55.5%	71.4%	100%	100%
Percentage of voting rights owned by controlling shareholders (B)	15.48%	13.23%	10.64%	10.32%	7.83%
A/B	3.6	4.2	6.7	9.7	12.8

Source: extracted from Yeh, Y.H. (2005) "How to Complete the Good Research on Corporate Governance", Fu-Jen Catholic University, Taipei

her brother, Yeh held approximately 15 percent of Procomp's shares by the end of 1999. Although her shareholdings gradually dropped to about 7 percent in 2004, she was still the biggest shareholder who could significantly influence the board (Wang 2004) and the inclusion of family and close friends on the board was increasing over the years. Table 2 shows the percentage of the board going toward Yeh and her family members, and the diminishing voting rights of other shareholders. Except for Yeh and her brother, who maintained their positions as the chairwoman-cum-CEO and vice-chairman over the years since 1999, there were frequent changes of board members, with an increasing number of management executives moving on to the board. By April 2003, the board was composed entirely of family members and close friends, none of whom could be considered independent directors.

Besides this nepotism at the highest levels, the company did not have an internal audit committee. Instead, supervisors[24] were invited and given the responsibility of overseeing the running of the board and investigating the company's finances. The two supervisors of Procomp, however, remained less independent and ineffective. One of the supervisors who was transferred to the board in 2002 also held a position in financial controlling in Procomp at the same

Tabe 3

Corporate Governance of Procomp

Procomp's Governance	Name	Position Held	Relationship to Sophie Yeh
CEO	Sophie Yeh	CEO, the largest shareholder with a 7% stake	
Board of Directors	Sophie Yeh	CEO, Chairwoman	
	Yeh Meng-ping	Vice Chairman	Brother
	Clark Peng	Vice CEO	Friend
	Lai, Che-hsien	Financial Controller	Friend
Supervisory Board	Cheah Cheng Hsu-ming	Supervisors	Unknown Friend
External Auditors	Deloitte & Touche Tohmatsu (since March 2004) KPMG	Certified Public Accountants	
Audit Committee	Nil		

Source: produced by the Author

24 In Taiwan, supervisors are designated to monitor the board of directors and are not allowed to take part in the decision-making or the voting process. They are responsible for scrutinizing decisions made by directors but do not have the right to approve directors' decisions. Their role also includes reviewing and auditing the reports provided by directors, resolving any disputes arising between shareholders and directors, and the ability to investigate a firm's finances or operations at any time.

time. Cheng Hsu-ming, who was the chairwoman of a political party-owned China Television Company (CTV) and an old acquaintance of Yeh, had been one of Procomp's outside supervisors since 1998. In response to the Procomp scandal, the spokesperson for CTV argued that, although they scrutinized Procomp's financial statements every year, it was impossible for the broadcaster to spot its manipulations since not even Procomp's certified public accountants (CPAs) could detect the accounting fraud (Taiwan News 2004). (Table 3 details the corporate governance of Procomp in 2004.)

THE VERDICTS

In July 2004, shortly after the Procomp case broke, two accountants from each of its former and current accounting firms were punished by the FSC for negligence in certifying Procomp's financial documents. The four CPAs from the two large international auditing firms were penalized for not being able to uncover the fact that Procomp's huge cash balances were actually nonexistent and were restricted by the banks. Consequently, the CPAs were suspended from certifying public companies' financial statements for two years. The commission accused the DTT accountants of failing to carefully double check other documents before giving their approval to the accuracy of the financial reports in 2003, including the bank savings, assets and subsidiaries' investment balances. KPMG accountants also had failed to ensure the accuracy of the company's foreign-currency savings and sales amounts by Procomp's sales agents before certifying Procomp's financial reports between 2000 and 2002. The punishment was thought to be one of the harshest given due to the huge amount implicated in the accounting scandal. However, both auditing firms strongly objected to this allegation and appealed for protection of their staff, whom they felt should not bear the fault They claimed to have adopted and followed professional accounting principles when checking the Procomp financial reports submitted to them.

In December 2005, Sophie Yeh, 46, was sentenced to 14 years in prison and a fine of US$5.4 million for her implication in a US$212 million accounting fraud, which violated the Securities Transaction Law, Criminal Law and Commercial Accounting Law (Wang 2005a). Before this, Yeh had been released on bail of US$2.4 million in May after being put behind bars for a year.

Clark Peng and Yeh's brother, Yeh Meng-Chuan, who were both on the company board, were sentenced to two years and 3.6 years respectively for their engagement in the fabrication of documents for fictitious companies and creating factitious transactions. One of the company's senior executive officers, Lu Jin-zhi, admitted his wrongdoings and donated US$760,000 to the Securities and Futures Investors Protection Center. The judge ordered the defendant to donate all the bonuses, stocks and monthly salaries minus US$303 each that he had received over the past years while serving Procomp. Using a donation as a form of penalty in the Procomp case was the first of its kind in Taiwan's history of economic crime punishment (The Liberty Times 2004).

Several former financial controllers and account managers were also convicted.The company's chief financial controller-cum-board member, Lai Che-hsien, 36, admitted his full participation in the accounting fraud which was led and instructed by Yeh. He was sentenced to four years in prison and a fine of US$1.5 million. Other key accomplices leading the financial operation of Procomp, Hsu Ching-hsiung and Hsieh Shih-fang, were on the run. Hsieh, who had fled the island and whose whereabouts was unknown, was the deputy CEO and former CFO of Procomp, and now faced a possible ten-year sentence and a fine of US$91,000.

Lin Shih-lung, an executive on the company's accounting and financial team, was an accounting graduate with rich experience in financial controlling at various corporations. He was sentenced to ten months in jail for knowingly ignoring and approving suspicious dealings among fictitious companies and allowing his subordinate accounting staff to issue invoices and receipts for nonexistent transactions. Chia Pao-hai, 36, the company's accounting manager from 1998 to 2002, was found guilty of his involvement in the abnormal business transactions. Although he had raised doubts about suspicious records to his superiors, he kept silent and ignored the records after receiving hints of the involvement of the CEO and chairman in manipulating activities. He pleaded guilty of the cover-up and agreed to donate US$486,000 to SFIPC. Excluding his salary, the bonuses he received during the six years he worked in Procomp amounted to US$27,000. He was also given a suspended sentence of five years. Lai Jiun-hsueh, 36, another accounting manager who had only worked at Procomp for about a year before the scandal broke, defended that he was not aware of the accounting fraud activities, but was only used by the top management. However, he pleaded guilty of negligence and agreed to donate US$27,000 to the SFPIC based on his monthly salary of US$2,130, and was given a three-year suspended sentence. Apart from Sophie Yeh, 28 of 30 executives were convicted of fraud and given sentences ranging from six months to four years in jail or sus-

Tabe 4

Punishment Given to Finance and Accounting Personnel in the Procomp Case

Internal Financial Team	Position held	Punishment sought	Charges
Chia Pao-hai	Accounting manager	Donation of US$48,375 to SFIPC and a five-year suspended sentence	Violation of Securities Transaction Law, Criminal Law and Commercial Accounting Law
Hsu Ching-hsiung	Assistant financial manager	(On the run) Undetermined sentence with not less than 2 years in jail	
Hsieh Shih-fang	Vice CEO-cum-financial controller	(On the run) A possible 10-year sentence and a fine of US$ 91,000	
Lai Jiun-hsueh	Accounting manager	Donation of US$27,211 to SFIPC and a three-year suspended sentence	
Lai Che-hsien	Financial controller	A fine of US$1.5 million and four years in jail	
Lin Shih-lung	Financial controller	Ten months in jail	
Tan Chee-wen	Financial manager	A five-year suspended sentence	
Yeh Yit-hwei	Assistant financial controller	2.5 years in jail	
Yeh Meng-chuan	Financial manager	3.6 years in jail	
External Accountants			
Lee Cheng-ming Wang Ching-shan	Certified public accountant from DTT	Licenses to certify public companies' financial statements suspended for two years	Administrative penalties for their negligence under the Securities Transaction Law
Tsai Tien-yuan Yu Wan-yuan	Certified public accountant from KPMG	Licenses to certify public companies' financial statements suspended for two years	

Source: produced by the Author

pended sentences. The other two, including Yeh Meng-ping, were released due to insufficient evidence. Table 4 presents a brief summary of the punishment given to finance and accounting officers involved in the scandal.

ACTION TAKEN

Despite Procomp having declared bankruptcy, none of the personal assets of its management had been frozen. In order to uphold investor confidence and help safeguard the local equities markets, prolonged negotiations led to agreement from the stock brokers to pay part of the damages caused by Procomp management's embezzlement. A total of US$2 million was agreed to by Yuanta Core Pacific Securities, Fubon Securities Co., Hua Nan Securities Co. and Taiwan International Securities Corp. to pay to Procomp shareholders (Wang 2005b).

The FSC was established only on 1 July 2004, soon after Procomp defaulted on a US$89 million bond payment. The regulatory body examined two particular areas in order to improve corporate governance and risk management in listed companies in Taiwan. One of them was the Securities Transaction Law Amendment and another was the Commercial Accounting Law Amendment (CALA) (Liu 2004). Some of the initiatives in the former legislation included the restructuring of a corporation's directorship and requiring at least a quarter of the board's seats to be allocated to independent directors. Furthermore, the FSC set up an audit committee comprised of independent directors to replace board supervisors for large corporations. The financial reforms also led to the signing of the cooperative memorandum with foreign regulatory bodies to jointly enhance information and technology sharing and to counter cross-border economic crimes.

Certain aspects of the CALA were influenced by the US's Sarbanes-Oxley Act (SOX) of 2002. The FSC imposed tougher sanctions for violations that could cause serious financial losses to investors and FCS regulators were given authorization to examine a CPA firm's financial operations and documents, if necessary. The US's concept of limited liability partnership (LLP) was introduced as the standard organizational arrangement for large CPA firms whereby the felonious partner assumes unlimited liability while others are liable only up to their stake in the company. Besides, the initiatives ordered to toughen the requirements for CPA registration and to strengthen the CPA associations' role in improving the quality of CPAs' work and promoting continuing education, especially in professional ethics, for accountants.

CONCLUSION

This case has shown how a company with great potentials had paved itself a road leading to a dead end. Following the suspension of Procomp's share trading in June 2004, it was revealed by the investigative authority in Taiwan that the company's executives and its overseas sales agents had been colluding for years to overstate sales revenue, manipulate stock prices, illegally leverage assets and arrange bonds through fictitious companies. Yeh, as chairwoman of the company, and her accomplices, many of whom belonged to the company's accounting and financial controlling team, were found guilty of forgery and embezzlement and violating stock trading and accounting laws. The appointed CPAs from the renowned auditing firms, DTT and KPMG, were also held liable due to their negligence. Shortly after the exposure of the scandal, amendments to the Securities Transaction Law and Commercial Accounting Law were made to attach greater importance to the transparency and integrity of the listed companies and public accounting firms in Taiwan, including restructuring of listed companies' boards of directors, imposing tougher punishment on wrongdoers and promoting ethical conduct among accountants.

This accounting scandal raised concerns about the ethical standards of accounting practitioners and the importance of assessing the effectiveness of the internal control system within a company. The following are questions worth pondering:

QUESTIONS FOR DISCUSSION

1. What is the greatest challenge of implementing ethical control within Procomp and the cultural implication of the challenge? Briefly discuss the major initiatives that have been taken in the US and private sectors in order to tackle financial scandals and to enhance corporate governance and ethical practice of businesses and accounting professional.
2. What is the COSO framework and why is it needed? Which component of the framework is the most fundamental one in an internal control system? Based on the identified component, make an assessment in relation to the Procomp case.
3. Why was there no whistle-blower reported in the Procomp case? What are the problems or ethical concerns in whistle-blowing? How can one resolve the ethical dilemma of whistle-blowing?
4. Assess the responsibility of management accountants, internal auditors and external auditors in relation to Procomp's fraudulent accounting practices. What professional ethical principles and standards should have been applied to each of these professional accountants? Discuss the extent to which the accountants and corporate finance managers within Procomp complied with those ethical criteria.

REFERENCE

Central News Agency. 17 June 2004. Procomp Seeks Receivership after Disastrous Share Sale.

Chan, B.S. 29 August 2006. Understand Procomp Case from its Accounting Reports. Accounting Research and Development Foundation, http://mail.ardf.org.tw/~blog/index.php?d=17&m=11&y=06&category=3 (accessed 2 December 2006).

Chen, C.H., C. J. Lin, and Y.C. Tsai. 2005. The Association Between Employee Bonus and Subsequent Firm Performance. 2005 Conference on Finance, Taiwan Finance Association.

CompoundSemiconductor.Net. 13 December 2005. Procomp Fraudster Begin 14-year Prison Term. http://compoundsemiconductor.net/articles/news/9/12/11/1 (accessed 5 November 2006)

Fourel, J. 24 March 2004. Taiwan's ODM/OEM Industry: A Few Snapshots. www.oecd.org/dataoecd/45/17/31239069.pdf (accessed 7 November 2006).

Hu, S.D. 29 June 2004. Procomp's Fabrication of Account Statement. Dajiyuan http://www.epochtimes.com/b5/4/6/29/n581619.htm (accessed 20 November 2006).

Huang, J. 14 October 2004a. More than 8000 Claims Made against Procomp. *Taipei Times*.

---- 17 July 2004b. FSC Says Procomp Manipulated Stock. *Taipei Times*.

III-Vs Review, *The Advanced Semiconductor Magazine*. January 2005. Taiwan Refocused. http://www.three-fives.com/latest_features/feature_articles/070105Taiwan.html (accessed 17 November 2006)

Kuo, C., C. Fu, and Y. Lai. 2006. Board Control and Employee Stock Bonus Plans: An Empirical Study on TSEC-listed Electronic Companies in Taiwan", *Journal of American Academy of Business*, Cambridge, September, 10 (1): 248–255.

Lapedus, M. 7 September 2005. Consolidation Hits Gaas Foundry Market. *EE Times Online*, http://www.eetimes.com/news/semi/showArticle.jhtml?articleID=170700944 (accessed 8 November 2006).

Liberty Times, The. 21 December 2004. 5 Million Donation To SFIPC From 3 Defenders of Procomp Case. http://www.libertytimes.com.tw/2004/new/dec/21/today-so10.htm (accessed 20 November 2006).

Liu, C. Y. 2004. Trends and Developments in Insolvency Systems and Risk Management—The Experience of Chinese Taipei. Forum on Asian Insolvency Reform, 3–5 November 2004.

Mon, W. T. 2001. The Empirical Research on Crime Control Policy—Taiwan Experience. 2001 Annual Symposium on Crime and Its Control in Greater China, Center for Criminology, The University of Hong Kong; 5–6 July 2001.

Ridley, S. 8 July 2004. Collapse of Procomp Prompts Government Scrutiny. *Asia Times Online*. http://www.atimes.com/atimes/China/FG08Ad01.html (accessed 12 November 2006).

Rose, J. 20 July 2004. Procomp Becomes 'Taiwan's Enron'. Ethical Corporation, http://csr.moea.gov.tw/en/news/news_content.asp?nw_ID=1095 (accessed 12 November 2006).

Taipei City Government Official Website. Prosecutors Expected to File Class-act Lawsuit against Tech Company. http://english.taipei.gov.tw/TCG/index.jsp?recordid=2514 (accessed 18 November 2006).

Taipei Times. 14 November 2005. Editorials: Promoting Corporate Accountability. http://www.taipeitimes.com/News/editorials/archives/2005/11/14/2003280141 (accessed 20 November 2006)

Taiwan Ministry of Economic Affairs. Procomp: A Pioneer in Taiwan's Compound Semiconductor Industry. ROC Website http://www.moeasmea.gov.tw/Eng/guidance/f04-b0i.html (accessed 1 November 2006).

Taiwan News. 17 November 2004. China Television to Challenge Court Ruling on Assets. http://english.www.gov.tw/TaiwanHeadlines/index.jsp?categid=8&recordid=78733 (accessed 3 December 2006)

Taiwan's Ministry of Economic Affairs, Small and Medium Enterprises Division http://www.moeasmea.gov.tw/Eng/guidance/f04-b0i.html (accessed 10 November 2006).

Vickers Ballas Investment Research and Primasia Research (24 September 2001), Taiwan Equity Research on Procomp Informatics Ltd (Code:2398): Sticking to Its Guns", http://www.primasia.com/Research/taiwan/update/240901update2398.pdf (accessed 15 November)

Wang, L. 28 June 2004. Yeh Rode Procomp Hype to Firm's Fall. *Taipei Times*:11.

Wang, L. 13 December 2005a. Former Procomp Chair Sentenced to 14 Years for Fraud. *Taipei Times*.

____19 March 2005b. Brokers Come to Procomp Clients' Aid. *Taipei Times*.