Military & Defense Sector Analysis

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Rating: NA

Analyst : Mark Chen
Tel: (852) 2147 8819
Email: markchen@abci.com.hk

Key Data*

2013 P/E (x)	97.10
2014E P/E (x)	67.29

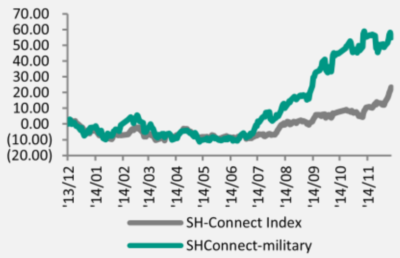
* Trimmed data with outlier adjusted
Source(s): Bloomberg, ABCI Securities

Sector performance (%)

	Absolute	Relative*
1-mth	6.72	(7.55)
3-mth	33.92	15.38
6-mth	72.62	42.13

* Relative to HSI
Source(s): Bloomberg, ABCI Securities

1-Year Sector performance (RMB)



Source(s): WIND, ABCI Securities

Abstract

China's military sector is facing three major investment opportunities：

- Injection of military assets
- Civil-military integration
- Chinese military spending growth and increased demand for military construction

According to Wind data, among the 568 stocks eligible for northbound trading in the Shanghai–Hong Kong stock connect program, 23 stocks have a clear military positioning. These are compared with the remaining A-shares in the program. These military stocks have the following characteristics:

- The majority of the 23 stocks are large state-owned enterprises (SOEs)
- Market capitalization of military stocks in the Shanghai stock market is still small (4.6%), and choices are limited
- Operational efficiency of these companies are yet to improve
- The 2014E P/E of military stocks is higher than the average of A-shares in the northbound trading list, indicating a high valuation in the former

Stock picks：

CHINA AVIC ELECTRONICS（600372）：Monopoly in China's avionics field that has strong financial and technical barriers. Its products are widely used in fighter aircraft, electronic warfare aircraft, etc. It may benefit form possible assets injection and civil-military integration.

Risk factors：1）High valuation；2） Uncertainty of asset injection；3）Uncertainty of shift to civilian market；4）Overall risk of A-share market

China Spacesat (600118)： Specializes in the area of BeiDou Navigation Satellite System (BDS); a leader in SATCOM products, the company also owns the agent's right of remote satellite sensing data in the "Mapping Satellite" series. In addition, it may benefit from the growing demand of military supplies as well as the asset injection.

Risk factors：1）High valuation；2）Uncertain of assets injection ；3）Uncertainty of Chinese military investment and demand；4）the overall risk of A-share market

Baotou Beifang Chuangye (600967)： A civilian enterprise under the Inner Mongolia First Machinery Group Corporation. It is a leader in China's railway wagon market. Its parent company manufactures battle tanks and wheeled combat vehicles. The company benefited from high demands resulting from battle tank replacement and military investment. In addition, the company may benefit from potential military asset injection and is expected to benefit from increasing demand for railway wagons spurred by the Silk Road Economic Belt.

Risk factors：1）Uncertainty of asset injection；2）Insufficient tendering for wagons as China's economy contracts and thermal coal demand decline ；3）the overall risk of A-share market

Content

Investment analysis on military stocks in the SH-HK Stock Connect northbound trading list

Characteristics of military stocks

Commencement of the SH-HK stock connect provides an important opportunity for foreign investors to invest in China's military stocks. According to Wind data, we select 23 military stocks among the 568 stocks in the northbound trading list.

Compared with other A-shares in the stock connect program, these military stocks have the following characteristics：

- **Most of these 23 stocks are large state-owned enterprises (except SANYHEAVY INDUSTRY).** The average free-float market capitalization is about RMB 11.2 billion, which is higher than the average of all A-shares included in the northbound trading list (northbound A- shares) at RMB 9.9 billion (as of Nov.25, 2014).
- **Weighting of military stocks among the northbound trading stocks is still low.** By free-float market capitalization, the military stocks accounts for 4.6% of total among the northbound trading stocks; by total market capitalization, they took up 4% of the stocks' total.
- **Low operational efficiency**. The average ROE of military stocks was 6.18% in 2013, lower than the northbound A-shares' average at 10.45%. Operational efficiency of these military enterprises is yet to improve.
- **High valuation**. The 2014E P/E of these military stocks is 321x (64x if excluding outliers), which is much higher than that of the northbound A-shares at 50x. The median of 2014E P/E of these 23 military stocks is 61, much higher than the northbound A-shares at 21x.

These indicate a mismatch between profitability and valuation in the military sector. The market may have factored in the premium of future businesses or potential assets to be acquired

Investment themes of military stocks

Injection of high-quality military assets brings opportunities

1、 Joint-stock reform in military enterprises may lead to injection of high-quality assets

In June 2007, COSTIND, NDRC and SASAC jointly issued "The Guidance on joint-stock reform of military enterprises" and started the shareholding reform in military enterprises. The reform was considered as an urgent and important task by the Chinese government.

Chinese government aims to: 1) eliminate the industry, military, and ownership boundaries to expand financing channels; raise the overall competence of the national defense industry; 2) Establish a standardized corporate governance structure in military enterprises by switching operational mechanism; encourage proactivity of military enterprises so they would become more market-oriented; 3）Optimize resources allocation and enhance value of state-owned military assets.

Chinese government aims to complete the stock reform of qualified military enterprises in a few years, partly through diversifying the shareholding structure and establishing a modern enterprise and property rights systems.

So far, asset securitization rates of military enterprises are still low, except for two major aerospace groups, one military weapon group and one equipment groups that have high-quality assets in the listed companies. Asset securitization will be the future focus of the military sector.

2、Reform of the military institutes create opportunities for asset injection

China's military industry emulated that of the former Soviet Union by combining research and production factory together. With the development of China's defense industry, the organization of military industry has undergone significant changes. A total of 10 military industry groups were formed. The industry has also been establishing a modern enterprise system more suitable for market-oriented economy.

Many military factories have already completed restructuring and a large number of joint-stock companies have been established; reform progress of military research institutes, however, lagged far behind, with many still relying heavily on state funding. The systemic difference between military research institutes and military factories is the main reason behind the delay of asset integration between the two.

With the deepening of Chinese military enterprise reform, the 10 large military groups gradually expand the types of assets being injected into the listed companies. At the beginning, only civilian business was injected into these listed companies; supplementary military business was later on included and at present, core military product business is also covered. Currently, there are 70 listed companies among the 10 military groups.

However, asset reform of the military research institutes is still falling behind. Due to their business nature, these institutes are not eligible for listing. For example, asset securitization rate of military enterprises specializing in aerospace and electronic segments was only at 20%, far lower than those in the aviation and shipping segments (~50%).

Asset securitization of military research institutes was stagnant, restraining further reform in the large military groups. Therefore, restructuring of the research institutes and asset injection have become the focus in the new round of reform in the military industry. Restructuring the research institutes is a daunting task due to the difficulties and the wide scope involved- its result will directly determine the success of military industry reform, affecting the future development of the sector. Thus, such changes would need to be supported by complementary national policies.

In terms of government policy, China has already proposed reform in the military research institute in 2010 and 2011. The State Council and the Central Military Commission issued the "Opinions on building and improving weaponry research and production systems with civil-military integration" in 2011; the State Council issued the "Guidance on classification of promoting institutional reforms" in 2011. In accordance with the national planning, military research institute reform will be completed by 2016. Based on the information released during China's first annual military industry and finance meeting, the pilot program for military research institutes reform has been submitted to the relevant departments, meaning that restructuring of the relevant institutes may commence in the short term.

The year of 2015 will be crucial for the restructuring of the military research institutes. Such restructuring may trigger a new round of sector re-rating.

Development of Civil-military integration

1. Investment opportunities resulted from the military-to-civil shift

In the late 1970s, the Chinese government believed that another world war was unlikely to occur in the long term and decided to focus on economic construction. The government also turned to peace-building instead of national defense. It slashed the army force by 1.5 million personnel and reduced its orders for military supplies. Meanwhile, the Chinese government developed a "civil-military integration" initiative for the national defense industry, demanding the industry to assist in the modernization of industrial, agriculture, science and technology, and national defense sectors.

China's national defense industry mainly includes the nuclear industry, aerospace industry, aviation industry, shipbuilding industry, weapons industry and others. All these industries will be the key focuses of this military-to-civil shift.

2. Profitable growth opportunities resulted from private enterprises participating in the military industry

Under the civil-military integration, private companies can also participate by providing services and goods in the military industry.

From a technical point of view, China's private enterprises have strong capabilities of developing information technology weapons. Especially in the areas of electronics, computer, high-end manufacturing and materials technology, some private enterprises are even more competent than that of the military institutes. Versatility and compatibility of their products also improved gradually. In 2013, 2/3 of the t weaponry research and production licenses were granted to non-public enterprises.

On the 18th National Congress of the Communist Party, and the 18th Session of the Central Committee of the Communist Party of China (the 3rd and 4th plenary session), the Chinese leaders stressed the importance of civil-military integration, regarding the goal as a major, long-term strategic decision in China's military industry reform. China has decided to launch the weapons and equipment procurement information website at end-2014 as a step to deepen the civil-military integration.

In addition, SASTIND proposed to further promote civil-military integration and develop follow-up initiatives in a meeting in Oct 2014. It is expected that access to the Chinese military market, military project approval procedures, weapons and equipment procurement will be open to t private capital. We believe private enterprises participating in the military industry will benefit from the increased business opportunities.

Overview of military construction development

1. Investment opportunities resulted from the increased demand for military supplies

China has numerous neighboring countries and the longest land border. Territorial and maritime rights disputes have been frequent. In recent years, Japan, the Philippines, Vietnam and other countries have taken more radical measures amid the disputes. Although the outbreak of a large-scale war is unlikely, China recognizes the need to improve their armaments and strategic resource reserves to prepare for outbreak of potential conflicts.

According to official figures, China's military strength in the air and sea domains is lagging behind that in the U.S. The total number of air, sea and Marine Corps aircrafts in the United States is 13,683; it also has 10 aircraft carriers. In contrast, China has a total 2,788 of military aircrafts and only 1 aircraft carrier.

In addition, the majority of Chinese fighter aircrafts are of the 2^{nd}-generation, in addition to the small number of 3^{rd}-generation fighters. Most aircrafts in the U.S. are of the 3^{rd}- or 4^{th} generation, with the 5^{th}-generation aircraft being underway. The quantitative and qualitative differences in armament between the two countries are substantial.

The U.S. on average produces 8.5 million barrels of crude oil and consumes 19 million barrels daily; it has 20.6 billion barrels of oil reserves. China produced 4.08 million barrels of crude oil, which is less than half of its daily consumption (9.5 million barrels); the country has not yet developed a strategic oil reserve base. China has only 90 million barrels of crude oil in reserves during the first phase of its strategic petroleum reserve.

It reveals that China still needs to further invest in armament, military research and strategic resource reserves.

From the financial point of view, China's military spending, despite the rise in recent years, accounts for less than 2% of its GDP compared to 5% in the U.S. China's military expenditure takes up about 5% of the national financial expenditure; in U.S., the same figure is 20%. Thus, we believe China's military spending still has much room to grow over the next few years.

2. Changes in national defense policy leads to changes in resource allocation

According to the overall goal of modernization and regularization of the revolutionary armed forces proposed by Deng Xiaoping, the Chinese army has completely shifted the development model that emphasizes on scale expansion to one that stresses on quality. One of the highlights is the application of modern science and technology to the development of weapons and equipment. New breakthroughs in the development of strategic missiles, communication satellites and other high-tech weapons have been achieved.

Taking into account the gap between China and other military powers, China will continue to invest in the development of missiles and communication satellites in the next few years. In addition, the construction of the aircraft carrier has been progressing steadily, and it is expected that a large number of new warships will be produced. In the near term, R&D and production of high-end navy equipment and non-combat aircrafts will be the focus of investment.

3. Military unit investment opportunities resulted from key technological breakthroughs

China's technology continues to break new grounds in recent years. In terms of the aircraft, breakthroughs were made in the development of large transport aircraft, fighter jets and helicopter gunships. It has also has made great progresses in engine development. In the field of airborne systems and technical materials (including bearings, metal materials or non-metallic materials, etc.), there are a number of listed companies showing strong R&D capabilities and high profitability. Overall, we believe stocks in the China's aviation equipment industry deserve close attention.

Stock picks

I. China AVIC Electronics（600372）

Introduction: The company is specialized in the manufacturing of aircraft lighting and control system products. Its main products include aviation lighting systems, cockpit dashboard components and dimming system (CPA), the aircraft centralized alarm systems, aircraft ground proximity warning systems, aviation-specific drivers and actuation systems, electrical control device system series, aircraft loading system products, photovoltaic inverters, electric scooter control systems and other non-military lighting systems.

Investment Highlights：

1）Industry monopoly: The Company monopolizes the Chinese avionics market. Its products are widely used in various aircraft models. As the industry entails high financial and technical barriers, other domestic enterprises are mostly engaged in the production of spare parts.

2）The products are widely used in the avionic systems in fighter aircrafts, electronic warfare aircraft and airborne warning aircrafts, which will benefit from military procurement and military construction.

3）The company plans to develop in the civilian markets unrelated to air defense (mainly aerospace and shipbuilding). It is expected to benefit from policies relevant to the military-to-civil shift.

4) In June 2014, AVIC entrusted the full stakes of 航电系统公司 to the management of a trustee company. Related assets, including 5 military research institutes, will result in huge custodian fees to the listed company, laying the groundwork for asset injection of the 航电系统公司.

5）The ROE of the counter is the highest among the 23 military stocks identified in the northbound A-shares, reaching 13.14% (vs. the average of 10.45%).

Risk factors: 1）High valuation；2）uncertainties of assets injection；3）success of the military-to-civil shift；4）the overall risk of Chinese A-share market

（II）China Spacesat（600118）

Introduction：The company specializes in the development of small satellites and micro-satellites, satellite ground application systems, aerospace equipment manufacturing. It is an enterprise providing high-tech products and services with integrated design, development, and operational capabilities. Its ground application system of satellites and equipment manufacturing cover 5 major areas, including ground station system integration, satellite navigation, satellite communications, satellite remote sensing, information transmission and image processing. Specializing in BeiDou Navigation Satellite System (BDS), the company is a leader in the SATCOM market and owns the agent's right of remote satellite sensing data in the "Mapping Satellite" series.

Investment highlights：1）As a national expert in satellite development and application, the company enjoys a monopoly position; 2）China's demand for space infrastructure, especially military aerospace equipment, is huge. Investment in this field is expected to be high; 3）Restructuring of the shareholder, China Academy of Space Technology (CAST) is underway and asset injection is expected.

Risk factors：1）High valuation；2）Uncertain of asset injection ；3） Size of investment in space infrastructure may affect the company's profitability；4）Overall risk of Chinese A-share market

（III）Baotou Beifang Chuangye（600967）

A civilian enterprise under the Inner Mongolian No.1 Machine-building Group Corporation- a subsidiary of China North Industries Group. The company is a leading enterprise in the railway wagon market, and is primarily involved in the production and sales of railway vehicles and specialized vehicles. The company is considered as high-tech enterprise in Inner Mongolia. Its market share in the railway-oriented vehicles reaches 10%, ranking high among the 18 railway wagons manufacturers. It is the leader in China's railway wagon market. The company, a high-tech enterprise in Inner Mongolia, mainly produces and sells rail vehicles, special purpose vehicles. Its rail vehicle enjoys a 10% market share in China, making it one of the top enterprises among 18 railway wagons manufacturers. It is also one of the pilot enterprises for high-speed, heavy-duty vehicles, and components as determined by the Ministry of Railways.

Investment highlights：

1） Its parent company produces battle tanks and 8*8 wheeled combat vehicles. The company will benefit from the replacement peak of battle tanks; demand for 8*8 wheeled combat vehicles and armored vehicles are expected to surge. These businesses entail higher profitability and could be injected into the company, which would in turn increase the company's valuation and earnings ability.

2） The company's railway wagons are highly competitive in China. With the implementation of the "New Silk Road" strategy, demand for these wagons may rise.

3） ROE of the company is higher than the average among northbound A-shares

Risk factors：1）Uncertainties in asset injection；2）Contracting economy in China and declining demand for thermal coal may result in insufficient tendering for railway wagons and affect the company's sales；3）Overall risk of Chinese A-share market.

Risk factors

This report refers to the military sector in northbound A-shares under the SH-HK stock connect program. All companies and information were obtained from WIND database and public information available. Due to the special nature of military enterprises in China's national defense, information disclosure of military enterprises information disclosure is tightly controlled by China's national security and defense-related regulations. Thus, the sector has a relatively low transparency. Limited information may result in inaccurate analysis and evaluations.

Investors would need to consider the following risks:

Risks triggered by cross-market mechanisms

- Investors should consider the significant difference in turnover, transaction time, clearing time under the program with the overseas market.
- Exchange rate risk
- All the northbound A-stocks under the program are priced and settled in RMB; overseas investors therefore have to be aware of the exchange risks, especially when the availability of RMB hedging instruments available are limited in overseas markets.

Risks triggered by market trading mechanisms

There are particular transaction mechanisms in China A-share market:

1）Lack of effective short-sell mechanism (high cost of margin trading), so that prices only adjust slowly toward their theoretical values;
2）Price limit increases liquidity risks;
3）The trading restriction of “T+1” further elevates liquidity risks.

Risks related to specific behaviors in China’s A-share market

Different from the H-share market, A-share market has the following features:

1) Frequent policy interventions;
2) Information asymmetry;
3) Retail investors as the main participants

The Chinese A-share market shows strong tendency of herd behavior. This in turn leads to stronger stock market synchronization. Share prices of individual stocks are therefore largely determined by market return.

In addition, China's judicial system is different from the common law of systems in Hong Kong and the U.S. in issues such as insider trading, manipulation of financial statements, expropriation by large shareholders, etc.

Finally, since China's stock market is still under reform, trade regulations, information disclosure, accounting standards and tax regulations are changing frequently. With the influx of foreign investors after the SH-HK stock connect program, the investment style in the A-share market may change over time.

Military Stocks in the Northbound Trading List

Code	Name	Price (RMB)	2014E P/E	Float Cap. (100mn)	Total Cap.* (100mn)	Target Price# (WIND)	Est. Return (%)	ROE (%) 2013	Military Concept
600262	Inner Mongolia North Hauler	22.40	50.15	15	38	NA	NA	11.07	Weapon
600435	North Navigation Control Tech	26.80	NA	98	199	NA	NA	1.08	Weapon
600480	Lingyun Industrial	15.89	NA	36	55	NA	NA	7.19	Weapon
600495	Jinxi Axle	25.10	107.09	116	173	NA	NA	5.03	Weapon
600967	Baotou Beifang Chuangye	14.95	34.84	95	125	19.78	32.27	12.45	Weapon
600031	Sanyheavy Industry	6.52	25.03	186	490	6.06	(7.06)	12.38	High-tech Equip
600038	Hafei Aviation Industry	37.51	66.91	82	215	42.75	13.97	6.60	High-tech Equip
600316	Jiangxi Hongdu Aviation Ind	27.69	218.44	103	199	10.60	(61.72)	1.95	High-tech Equip
600391	Sichuan Chengfa Aero-Science & Tech	26.50	245.37	55	87	NA	NA	1.94	High-tech Equip
600765	Avic Heavy Machinery	23.43	94.94	102	182	40.00	70.72	4.67	High-tech Equip
600806	Shenji Group Kunming Machine Tool	7.85	NA	16	28	NA	NA	0.56	High-tech Equip
600893	Xi'An Aero-Engine	28.64	64.37	148	569	33.00	15.22	7.58	High-tech Equip
601106	China First Heavy Industries	4.48	NA	101	266	NA	NA	0.10	High-tech Equip
601299	China CNR	6.45	13.69	221	653	7.06	9.45	11.37	High-tech Equip
601766	Csr	5.80	14.48	226	683	6.39	10.14	11.95	High-tech Equip
601989	China Shipbuilding Industry	6.39	33.08	362	1,106	7.94	24.19	6.55	High-tech Equip
600150	China CSSC	38.55	157.43	205	507	37.23	(3.43)	0.23	Aircraft Carrier
600372	China Avic Electronics	26.93	74.06	107	474	28.93	7.41	13.14	Aircraft Carrier
600685	Guangzhou Shipyard International	28.97	NA	58	122	28.34	(2.17)	0.34	Aircraft Carrier
600990	Anhui Sun-Create Electronics	52.08	78.12	41	71	38.58	(25.93)	7.78	Aircraft Carrier
600118	China Spacesat	21.95	76.37	121	259	23.25	5.92	9.48	Satellite & Navigation
600501	Aerosun	14.15	80.53	29	55	NA	NA	3.27	Satellite & Navigation
600879	China Aerospace Times Electronics	14.62	45.52	115	151	16.00	9.44	5.48	Satellite & Navigation

*Based on the definition of CSRC
The target price is from WIND's TP of market consensus
Source(s): WIND (up to Nov. 27, 2014), ABCI Securities

Disclosures

Analyst Certification

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Definition of equity rating

Rating	Definition
Buy	Stock return ≥ Market return rate
Hold	Market return – 6% ≤ Stock return < Market return rate
Sell	Stock return < Market return – 6%

Stock return is defined as the expected % change of share price plus gross dividend yield over the next 12 months

Market return: 5-year average market return rate from 2007-2011

Time horizon of share price target: 12-month

Definition of share price risk

Rating	Definition
Very high	2.6 ≤180 day volatility/180 day benchmark index volatility
High	1.5 ≤ 180 day volatility/180 day benchmark index volatility < 2.6
Medium	1.0 ≤180 day volatility/180 day benchmark index volatility < 1.5
Low	180 day volatility/180 day benchmark index volatility < 1.0

We measure share price risk by its volatility relative to volatility of benchmark index. Benchmark index: Hang Seng Index.

Volatility is calculated from the standard deviation of day to day logarithmic historic price change. The 180-day price volatility equals the annualized standard deviation of the relative price change for the 180 most recent trading days closing price.

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Office address: ABCI Securities Company Limited, 13/F Fairmont House, 8 Cotton Tree Drive, Central, Hong Kong.
Tel: (852) 2868 2183